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JULY/DECEMBER 1984

SPACE SHUTTLE AEROTHERMODYNAMIC DATA REPORT

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July/December 1984

Prepared under NASA Contract Number NAS9-17179

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Data Management Services
Chrysler Military-Public Electronic Systems
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New Orleans, Louisiana 70189

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National Aeronautics and Space Administration
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1. INTRODUCTION

Space shuttle aerothermodynamic data, collected from a continuing series of wind tunnel tests, are permanently stored with the Data Management Services (DMS) system. Information pertaining to current baseline configuration definition is also stored. This report lists documentation of DMS processed data arranged sequentially and by space shuttle configuration.

Purpose of this report is to provide an up-to-date record of all applicable aerothermodynamic data collected, processed, or summarized during the space shuttle program. Tables are designed to provide survey information to the various space shuttle managerial and technical levels. Table 1-1 summarizes the contents and purposes of report sections.

Purpose

Current baseline configuration

reference

Contents

Space shuttle configurations designated

as reference or baseline

	Summary data reports	List of DMS reports presenting results of data analysis or refinements	Index of space shuttle aerothermo design data reports
	Data file report digest	Compilation of space shuttle tests into operational status and basic configuration groups	Information arranged by vehicle on tests DMS processed or has in process
≤.	Wind tunnel test/DMS data processing summary	Table of space shuttle test data for which results have been incorporated into DMS data base	Reference of test data in DMS data base sequentially by data report number
.	Space shuttle facility wind tunnel summary	Summary of all space shuttle tests by facility	Information arranged by facility on tests DMS processed or has in process

Item

Baseline configurations

2. BASELINE CONFIGURATION DESIGNATIONS

Configurations designated as baseline or reference configurations are in this report. Figure 2-1 shows the orbiter, figure 2-2 the launch vehicle, figure 2-3 the ET and SRB, and figure 2-4 the carrier.

3. SUMMARY DATA REPORTS

Summary data reports differentiate from data reports in that data reports present basic wind tunnel data as collected and summary reports contain data germane to a particular design application of the basic aerothermo test data. Summary reports range from basic data reports of edited or refined data to reports presenting gleanings from basic data reports.

The list of summary reports (table 3-1) contains DMS-generated documents.

4. DATA FILE REPORT DIGEST

Data file digest (table 4-1) compiles all information in the DATAMAN system into three categories:

- 1) Recently published reports current six-month period.
- 2) Tests in process
- 3) Published reports

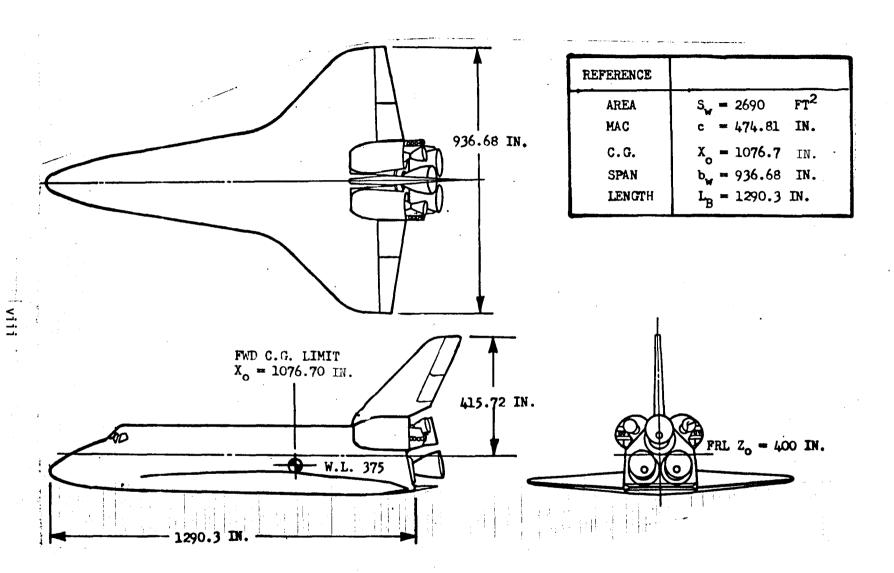
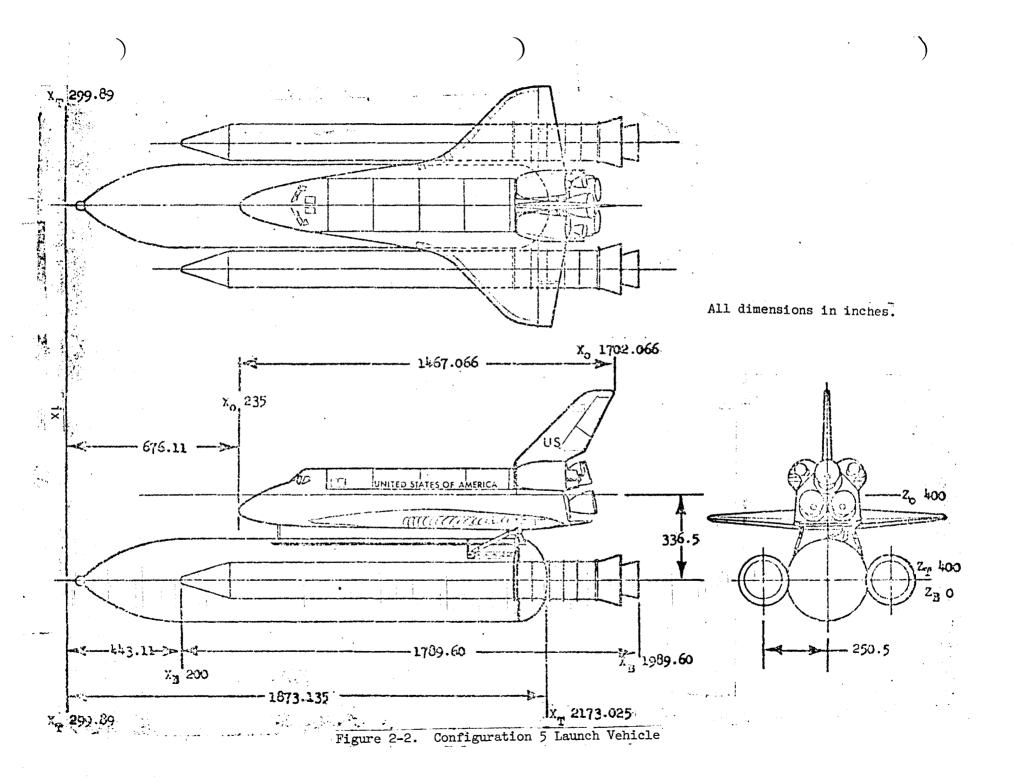
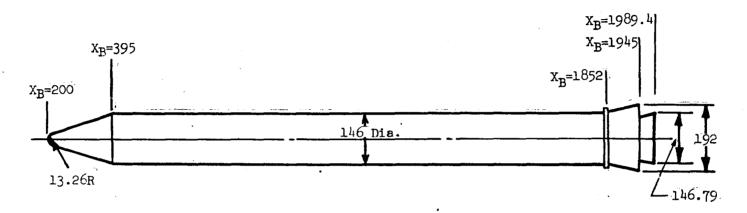


Figure 2-1. SSV Orbiter 5 Configuration Baseline





All Dimensions in Inches

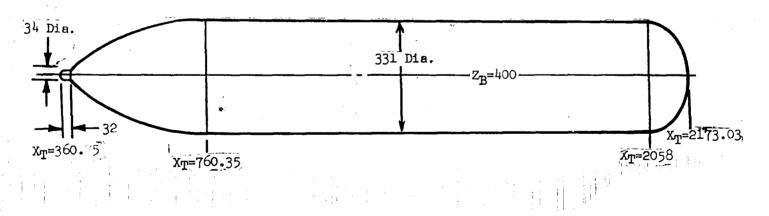


Figure 2-3. Configuration 5 External Tank and Solid Rocket Booster

REFERENCE DIMENSIONS (FS)

	ORBITER	747 CARRIER
WING AREA ∼ Ft ²	2690	5500
MAC $(\bar{c}) \sim INCHES$	474.81	327.78
SPAN (b) ~ INCHES	936.68	2348.04
MOMENT REFERENCE CENTER	67.5% LB	25.0 % Č
F.S. ~ INCHES W.P. ~ INCHES	1.109.0 375.0	1339·9 190.8

Aft Orbiter Attach Point

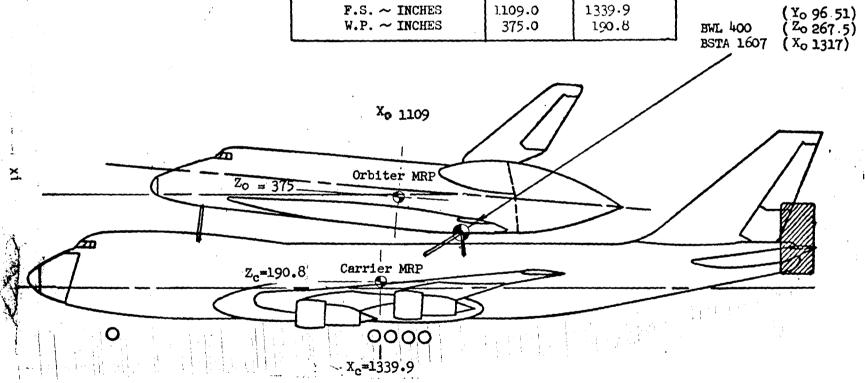


Figure 2-4. Orbiter/747 Flight Test Configuration

Each section is subdivided into five configuration categories:

- 1) Booster data
- 2) Orbiter data
- 3) Booster/orbiter data
- 4) External tank data
- 5) Carrier data

Information on each test is as follows:

- 1) DMS report number
- 2) NASA series number
- 3) NASA CR number
- 4) NASA TM X- number
- 5) Two-character test code
- 6) Configuration (specific)
- 7) Test number

5. WIND TUNNEL TEST/DATAMAN DATA PROCESSING SUMMARY

Space shuttle wind tunnel test data incorporated into the DATAMAN data base are listed by DMS report number in the processing summary (table 5-1). This summary collects test particulars so the reader can evaluate or categorize data. It contains the following information:

- 1) Test facility
- 2) Test identification
- 3) Configurations tested
- 4) Purpose of test
- 5) Type of test
- 6) Model scale

- 7) Test Mach number range
- 8) Testing agency
- 9) Cognizant test/DMS personnel
- 10) Basic publication numbers

6. SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY

Numerous wind tunnel facilities test space shuttle configurations. Table 6-1 collects information on tests completed or in process, grouped by facility. It contains the following information:

- 1) Two-character test code
- 2) Facility
- 3) Tunnel
- 4) Test number
- 5) NASA series number
- 6) DATAMAN report number

TABLE 3-1. Summary Data Reports List
(No Data Available at Present)

TABLE 4-1.

Data File Report Digest

. 2

INDEX OF RECENT PUBLICATIONS JULY /DECEMBER

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2220 V-08	LA52		72661	140 A/B SPACE SHUTTLE ORBITER	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 6458	HN
2459 V-01	0A310A 0A310B 0A310C	167,685		AFRSI SSV PRESSURE-LOADS MODEL 84- O	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 587-1	A2
2459 V-02	0A310A 0A310B 0A310C	167,686		AFRSI SSV PRESSURE-LOADS MODEL 84- O	LERC - 8 BY 6-FOOT SUPERSONIC WIND TUNNEL - 046 /LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 074	. A4
2516	05311	167,688	ı	MODEL 127-0, AFRSI BONDED TO SUPPO RT PLATE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 562-2/5	8 8
2517	OS314A/B/C	167,689		AFRSI BLANKET PANELS FORM-FITTED O VER A TWO-DIMENSIONAL MODEL OF AN	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 582-1	А9
2519	OA309	167,692		140C SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 838	D2

3

INDEX OF RECENT PUBLICATIONS /DECEMBER JULY

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2514	FA301	167,687		LAUNCH VEHICLE WITH INTERSTAGE FAI	MSFC - 14-INCH TRISONIC WIND TUNNEL 692	A 6

INDEX OF WORK IN PROCESS

ORBITER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2188	LA39				LARC - UNITARY PLAN WIND TUNNEL - 1075	QY
2213	LA53 LA54				LARC - FREON TUNNEL - 220-237 20-INCH HYPERSONIC TUNNEL (MACH 6) - 456	но
2228	LA46A/B				LARC - UNITARY PLAN WIND TUNNEL - 1092/1117 1117	HG
2237	OA 155			VEHICLE 5 ORBITER	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL - 114	J7
2256	LA68				LARC - 22-INCH HELIUM TUNNEL - 439	J8
2260	LA60B LA60C				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 715 8-FOOT TRANSONIC PRESSURE TUNNEL - 776	кв
2287	0513		a ve		ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 166-1	NN
2291	LA79				NSWC - TUNNEL 8A - 1275	JM

5

INDEX OF WORK IN PROCESS

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2292	LA36B				LARC - LOW-TURBULENCE PRESSURE TUNNEL - 214	JS
2339	0532				ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 167-1	20
2362	LA92				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 764	К1
2379	LA 106				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 776 .	кс
2383	LA93				LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 130	К2
2394	LA109				LTV - HIGH SPEED WIND TUNNEL - 611	FR
2411	LA116				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 804	KM
2425	LA117				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 813	KQ
2441	LA127	:			LARC - LOW-TURBULENCE PRESSURE TUNNEL - 255	KU
2442	LA128		• • •		LTV - HIGH SPEED WIND TUNNEL - 646	кү

INDEX OF WORK IN PROCESS

ORBITER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2446	LA122				LARC - UNITARY PLAN WIND TUNNEL - 1270	кх
2447	0552				ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 436-2	AB
2484	LA144			OV102-SSME ON	LTV - HIGH SPEED WIND TUNNEL - 742	FS
2497	MA34			ORBITER FOREBODY	AEDC TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 594	T4
2521	05310	167,694		MODEL 126-0, AFRSI	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 560-1-22	D4
2522	0\$315		·	128-0, OMS POD CONTOUR MODEL	AEDC - HYPERSONIC WIND TUNNEL (C) - V-C-3E	D5

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INDEX OF WORK IN PROCESS

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2239	LA38B				LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 676	QX
2460	FA27				MSFC - 14-INCH TRISONIC WIND TUNNEL - 655	1Y
2476	IA 190A IA 190B				ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 411-1,2,3 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	3น
2479	IA600				MSFC - 14-INCH TRISONIC WIND TUNNEL - 658	64
2518	IA301			LAUNCH VEHICLE WITH WING SPOILERS AND INTERSTAGE FAIRINGS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 695	D1
2520	IH97A/B/C	167,693		THIN-SKIN THERMOCOUPLE MODEL 60-OT S	AEDC - SUPERSONIC WIND TUNNEL (A) - V-A-1X HYPERSONIC WIND TUNNEL (C) - V-C-2E	D3
2523	LA301			LAUNCH VEHICLE WITH WING SPOILERS AND INTERSTAGE FAIRINGS	LARC - 16-FOOT TRANSONIC TUNNEL - 390	D6
2524	IH42	167,695		PHASE-CHANGE PAINT MODEL, 56-DTS	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 218	D7

BOOSTER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2012	SA 1F	120,090		SRB(PRR)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 554	79
2025	SA3F	128,767		142-INCH DIAMETER SRB WITH AND WIT HOUT STRAKES	MSFC - 14-INCH TRISONIC WIND TUNNEL - 565	80
2051	SA5F	128,774		BOOSTER MSFC MODEL NO.449	MSFC - 14-INCH TRISONIC WIND TUNNEL - 572	86
2087	SA 10F	134,116		SRB WITH VARIED SHROUD LENGTHS AND FLARE ANGLES	MSFC - 14-INCH TRISONIC WIND TUNNEL - 578	91
2088	SA2FA SA2FB	134,105		142-INCH SOLID ROCKET BOOSTER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 655 8-FOOT TRANSONIC PRESSURE TUNNEL - 662	PS
2111	SA26F	134,435		MODEL 449/CONF.NBRE1, NBRE1A, NBRE 1B, NBRE1S1ELT	MSFC - 14-INCH TRISONIC WIND TUNNEL - 590/595	95
2142	FA4	134,402		TITAN III C SRM	MSFC - 14-INCH TRISONIC WIND TUNNEL - 587	97
2150	SA25F	141,511		SRB	LARC - UNITARY PLAN WIND TUNNEL 1087	. Н9
2161	SAGF	134,422		SRB-BODY ALONE	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL 035	GE

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INDEX OF PUBLISHED DATA

BOOSTER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2207	SA29F	147,608		MODEL 467, SRB NOSE CONE AND FORWA RD CYLINDRICAL BODY	MSFC - HIGH REYNOLDS NUMBER WIND TUNNEL - 033	1E
2216	SH12F	141,802		SRB	LARC - UNITARY PLAN WIND TUNNEL - 1115	НА
2223	SA8F	141,549		ORB.W/ ATTACH RING,AFT RING,W/AND W/O PROTUBERANCES, NOSE CAP	MSFC - 14-INCH TRISONIC WIND TUNNEL - 604	1H
2244	SA28F	151,082		146-INCH WITH AND WITHOUT PROTUBER ANCES	MSFC - 14-INCH TRISONIC WIND TUNNEL - 603	11
2277	SA13F	144,579		MODEL 461, 142-INCH DIA. WITHOUT P ROTUBERANCES	MSFC - HIGH REYNOLDS NUMBER WIND TUNNEL - 034	1F
2310 V-01	SA14FB	151,083		RIGHT-HAND SRB REENTRY CONFIG.	MSFC - 14-INCH TRISONIC WIND TUNNEL - 640	IP
2310 V-02	SA14FB	151,084		RIGHT-HAND SRB REENTRY CONFIG.	MSFC - 14-INCH TRISONIC WIND TUNNEL - 640	IP
2325	SA14FA	147,645		CONF. 139	MSFC - 14-INCH TRISONIC WIND TUNNEL - 620	10
2331 V-01	SA11F	160,838		SRB-WITH HEAT SHIELD(SOLID)	ARC 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL 074-1 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY)	NX

BOOSTER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2331 V-02	SA11F	160,839		SRB-WITH HEAT SHIELD(SOLID)	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 074-1 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) -	NX
2334	SA16F	147,648		REENTRY CONFIG. WITH ALL MAJOR PRO TUBERANCES	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-4T) - E3A	VP
2345	SA21F		78195	146-INCH SRB/TRUNCATED NOSE (MODEL 486)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 645	1R
2369	SA31F	167,345		SRB REENTRY CONFIG.	MSFC - HIGH REYNOLDS NUMBER WIND TUNNEL - 039	1T

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DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION		TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2001	MA5	128,750		NR ATP ORBITER		LARC - UNITARY PLAN WIND TUNNEL 1002	0Q -
2002	LA1	128,752		NR PRR ORBITER		LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 626	ou -
2003	MA2	128,754		NR ATP ORBITER		LARC - 22-INCH HELIUM TUNNEL 409	OS -
2004	MA 1	120,082		MSC 040A ORBITER		LTV - 15-FOOT BY 20-FOOT SUBSONIC WIND T UNNEL S-081	DD -
2005	OA 1	120,070		NR ATP BASELINE ORBITER		MSFC - 14-INCH TRISONIC WIND TUNNEL 555	. 76 -
2007	OA4	128,760		NR SSV ORBITER		ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 147	BI -
2008	MA4	128,751		NR ATP ORBITER		LARC ~ CONTINUOUS-FLOW HYPERSONIC TUNNEL 89	OT -
2008 R-01	MA4	128,751		NR ATP ORBITER		LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 89	OT -
2009	DA3	128,761		SHUTTLE ORBITER OA3	. i	ARC 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL 650	ВН -

ORBITER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION		TEST NUMBER	2	DATASET 2-CHARACTER DESCRIPTOR
2014	OA7	128,753		NR PRR-SSV ORBITER		LARC - UNITARY PLAN WIND TUNNEL 1007	-	ov
2016	OA2	120,092		NR ATP ORBITER		NRLAD - LOW SPEED WIND TUNNEL 689	-	DF
2017	OA5	123,851		NR ATP ORBITER		NRLAD - LOW SPEED WIND TUNNEL 690	-	DG
2019	DA6	128,756		ATP AND PRR ORBITER		NRLAD - LOW SPEED WIND TUNNEL 694	-	DI
2020	0A9	128,757		PRR ORBITER		NRLAD - LOW SPEED WIND TUNNEL 696	-	טס
2021 V-01	0A45	128,758		-89A ORBITER		NRLAD - LOW SPEED WIND TUNNEL 699	-	DL
2021 V-02	0A45	128,758		-89A ORBITER		NRLAD - LOW SPEED WIND TUNNEL 699	-	DL
2022	0A10	128,759		RI -89B ORBITER	•	NRLAD - LOW SPEED WIND TUNNEL 698	-	DK
2023	LA2	128,763	: 4!	LO-100 ORBITER	•	LARC - 22-INCH HELIUM TUNNEL 411	-	OY
2029	0A47	128,765		2A ORBITER		MSFC: - 14-INCH TRISONIC WIND TUNNEL 568	: -	84

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER		DATASET 2-CHARACTER DESCRIPTOR
2030	OA 14	128,768		-89B ROCKWELL INTERNATIONAL SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL 700	-	DM
2031	LA3	128,769		LO-100 ORBITER	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 85	-	OZ
2033	LA4	128,772		LO-100 ORBITER	LARC - UNITARY PLAN WIND TUNNEL 995 1014	-	P1
2034	LA22	128,764		DOUBLE DELTA WING ORBITER	LARC - 22-INCH HELIUM TUNNEL 405	-	ON
2035	OH2A OH2B	134,077		THERMAL PROTECTION SYSTEM	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 158	-	BU
2036	LA5	128,775		LARC LO-100 ORBITER	LARC - 22-INCH HELIUM TUNNEL 413	-	P2
2037	0A84	134,405		140A/B ORBITER	LTV - HIGH SPEED WIND TUNNEL 488	-	FO
2038	OA16	128,793		NR ORBITER	NRLAD - LOW SPEED WIND TUNNEL 701	-	DN
2040	LA6	128,773		NAR 089-B-139 ORBITER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 643	-	P4
2041	LA7A	128,781		LARC LO-100 ORBITER (SHIPS)	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 644	-	P5

ORBITER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2042	1A52	134,087		ORBITER ALONE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 584	98
2043	LA16	128,770		RSI TILES.ORBITER	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 624	PB
2044	OA11A	128,786		SHUTTLE ORBITER 2A	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 157	BS
2045	OA 18	128,779		ROCKWELL SSV ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 704	DO
2046	LA 17	128,776		LARC LO-100 ORBITER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 648	PC
2047	LA31	134,086		O4OA SPACE SHUTTLE CONFIGURATION	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 98	QN
2049	0Н4О	128,771		NR 2A ORBITER	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 3619/3670	ox
2050	OA43	128,790		ROCKWELL SSV 2A ORBITER	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 706	ВТ
2052	LA 10	128,791		LO-100 ORB(SHIPS) (BW2VFB)	LARC - UNITARY PLAN WIND TUNNEL - 1015	Р8

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2053 V-01	0A21B	128,792		ORBITER 3	NRLAD - LOW SPEED WIND TUNNEL - 705	DP
2053 V-02	0A21B	128,792		ORBITER 3	NRLAD - LOW SPEED WIND TUNNEL - 705	DP
2054	LA8A LA8B	128,796		NR ORBITER	LARC - UNITARY PLAN WIND TUNNEL - 1023/1034	P6
2055 V-01	OA48	128,780		ORBITER 139	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2055 V-01	OA48	128,780		ORBITER 139B	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2055 V-02	OA48	128,780		ORBITER 139	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2055 V-02	OA48	128,780		ORBITER 139B	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2055 V-03	OA48	128,780		ORBITER 139	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2055 V-03	OA48	128,780	1	ORBITER 139B	MSFC - 14-INCH TRISONIC WIND TUNNEL - 574	87
2056	LA9	128,782	•	NAR 089B-MOD NOSE	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 130/135	P7 ·

ORBITER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2056	LA9	128,782		NAR 089B-MOD NOSE + OMS	LARC - LOW-TURBULENCE PRESSURE TUNNEL 130/135	P7
2057	OA44	134,411		ORBITER, MODIFIED 2A,3	LARC - UNITARY PLAN WIND TUNNEL 1035	PN .
2058	OA 17	134,079		ORBITER NAR VL70-0001348 CONFIG.	LARC - LOW-TURBULENCE PRESSURE TUNNEL 138	PP -
2059	OA11B	128,798		ORBITER 2A	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 160	вх
2060	OA58	134,091		ORBITER 3,A	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 163	BY -
2061	OA68	128,789		VL70-000147B (MODEL NO. 49-0)	NRLAD - 7-FOOT TRISONIC WIND TUNNEL 276	DR -
2061	0A68	128,789		VL70-000139B (MODEL NO. 42-0)	NRLAD - 7-FOOT TRISONIC WIND TUNNEL 276	DR -
2066	LA11	128,783		SPACE SHUTTLE ORBITER 089B-139	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 96	PD -
2067	052	128,777		O.025 SCALE MODEL OF SPACE SHUTTLE ORBITER (24-0) FIN/RUDDER	LARC - 26-INCH TRANSONIC BLOWDOWN TUNNEL 544	PZ -
2068	OA71A	128.797	' İ	-89B(2A) ORBITER	NRLAD - LOW SPEED WIND TUNNEL 708	DS -

DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2069	MA7	134,074		PRR ORBITER	LARC - UNITARY PLAN WIND TUNNEL - 1031	PM
2071	0A23	128,799		MODEL 32-0	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 168	. В6
2071	0A23	128,799		MODEL 49-0	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 168	B6
2073	0A70	134,070		MODEL 42-0 OF THE VL70-000139B SSV ORBITER CONFIGURATION 3	LARC - UNITARY PLAN WIND TUNNEL - 1043	PV
2074	OA57A	134,414		-89B SPACE SHUTTLE ORBITER FERRY C ONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL - 709	DT
2075	OH4 1	128,784		MODEL SS-H-00326-1	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 3778/ 3855	P3
2076	OH4 1A	128,785		SS-H-00326-4	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 4060/ . 4079	P9
2076	OH41A	128,785		SS-H-00326B-5,-6,-7	LARC - MACH B VARIABLE-DENSITY HYPERSONIC TUNNEL - 4060/ 4079	P9 .

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2077 V-01	IA29 OA63	134,095			ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 630	ЕВ
2079	LA 15	134,083		O89B-139B(MODIFIED NOSE)	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 441	PH
2080 V-01	OA57B	134,416		-89B SPACE SHUTTLE ORBITER FERRY C ONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL - 713	DV
2080 V-02	OA57B	134,417		-89B SPACE SHUTTLE ORBITER FERRY C ONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL - 713	DV
2081 V-01	OA69	141,580		-140 A/B SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 711	DQ
2081 V-02	OA69	141,581		-140 A/B SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 711 -	DQ
2082	0A73	128,800		CONFIGURATION 3A ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 167	85
2083	OA2OA	134,081		SSV 140A/B ORBITER	LARC - UNITARY PLAN WIND TUNNEL - 1057	Q2
2085	0H10 IH2	167,344			ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 171	B9
2086	OA71C	134,078		-89B ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 712	DU

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2089	OA25	134,082		140A/B	LARC 8-FOOT TRANSONIC PRESSURE TUNNEL - 661	Q1
2090	LASC	134,080		089B-139B ORBITER CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL - 1040	P6
2091	LA7B	141,512		LO-100 ORBITER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 657/660	P5
2092	OA72		71968	ORBITER 139B (34-0)	LARC - 22-INCH HELIUM TUNNEL - 415	PT
2094	0\$1	134,073		BASIC WING AND 11 HZ INBD AND 13.5 HZ OUTBD ELEVON ROTATIONAL FREQ	LARC - - 26-INCH TRANSONIC BLOWDOWN TUNNEL - 545	QT
2095	0A49	134,404		ORBITER	MSFC - 14-INCH TRISONIC WIND TUNNEL - 581	92
2096	0Н13	134,101		B10C5D7F4M3V5W87	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 644	РО
2097	0A62A	134,102		140A/B SSV ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 715	DW
2100	OH3A OH3B	134,075			AEDC - HYPERSONIC WIND TUNNEL (B) - VA289	тм

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2101	0H42A 0H42B 0H42C	134,076		B17C7M4F5W103E22V7R5	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 4080/4105 4130/4193	PA
2102	IA15	134,089		OT+L+P1+A1+F	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 175	EG
2103	IA62F	134,094		(D34)(T14)(S12)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 589 TRISONIC WIND TUNNEL -	94
2103	IA62F	134,094		(034)(T9)(S12)(PT4)(FR4)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 589 TRISONIC WIND TUNNEL -	94
2104 V-01	OA62B	134,112		140A/B SSV ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 717	DZ
2104 V-02	0A62B	134,113		140A/B SSV ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 717	DX
2106	LA 14A LA 14B		72630	O89B ORB.W/MOD NOSE	LARC UNITARY PLAN WIND TUNNEL 1046/1049	PG
2107	LA2O		72631	089B ORBITERW/MOD. NOSE	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 653	· PK
2109	OH45	141,527		147B CONFIGURATION ORBITER MODEL (50-0)	LARC - FREDN TUNNEL - 121-137	QS

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DMS DMS-DR+	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2113	OA85	134,111		VL70-000139	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 101	QI
2114	OA86	134,098		B30 THRU B50C9M7F8W116E26V8R5X9	NRLAD - LOW SPEED WIND TUNNEL - 716	DX
2115	OA87	134,085		140A/B	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 176	EF
2116	OA91	134,888		B19C7F5J59W107E23V7R5X2O + NACELLE RAKES	NRLAD - 7-FOOT TRISONIC WIND TUNNEL - 278	DY
2117	OH14	147,617		B22C7F5M4V7W111	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 648	QL
2120	OA 106	134,426		ORBITER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 668	QZ
2121	LA38A			TASK CANCELLED, JULY, 1975	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 669	QX
2124	IA16 OA26	134,093		140A/B ORBITER CONFIGURATION	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 180	EM
2125	OA88	134,409		BODY ALONE (-140A/B)	LARC - 22-INCH HELIUM TUNNEL - 422	qc
2126	LA25	·		TASK CANCELLED, DEC., 1976	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 100	PX

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2127	LA35		71954	-139 B ORBITER WITH VARIOUS CONTRO L DEFLECTIONS	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 102	QU
2128 V-01	OA53A	134,114		140A/B	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 747	EJ
2128 V-02	OA53A	134,115		140A/B	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 747	EJ
2130	OA22A	141,529		SSV 140A/B ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 716	В2
2131	0A22B	141,530		SSV 4 140A/B ORBITER	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 716	В4
2132	LA42	141,535		-089B W/MOD NOSE	AEDC - HYPERSONIC WIND TUNNEL (B) - 48A	TP
2133	IA58	134,110		ORBITER	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 107	QK
2134 R-01	OA77 OA78	134,429		ORBITER -140A/B CONFIG.	AEDC - HYPERSONIC WIND TUNNEL (B) - VA474	TN
					HYPERSONIC WIND TUNNEL (C) -	
2135	LA13			TASK CANCELLED, AUGUST, 1974	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 99	PF

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DMS DMS-DR-	NASA SERIES NUMBER	CR T	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2137 V-02	OA 105	134,106		CONFIGURATION3, MODEL 32-0	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 109	H2
2139	OA118	134,407		VL70-000140A/B, MODEL 43-0	NRLAD - LOW SPEED WIND TUNNEL 724	F6 -
2140	0A37	134,408		140 A/B SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL 719	F2 -
2141	OH11	141,538		MODEL NO. 29-0/VL70-000139	AEDC - HYPERSONIC WIND TUNNEL (B) VA354	TS -
2147	DA2OC	134,097		140A/B SSV ORBITER	LARC - UNITARY PLAN WIND TUNNEL 1057	Q2 -
2149	0A90	141,805		CONFIG. 4 (-140A/B) MODEL 72-0	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 110	- Q J
2151	0H6	141,815		THERMOCOUPLE MODEL OF SSV ORB. 139	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 183	EQ -
2152 R-01	OA81	134,423		VEHICLE 4 ORBITER (MODEL 51-0)	AEDC - HYPERVELOCITY WIND TUNNEL (F) VA489	T0 -
2153	IH1	151,377		TANK ALONE	LARC - UNITARY PLAN WIND TUNNEL 1071	Q7
2154	OH4A	134,437		MODEL 29-0	AEDC - HYPERSONIC WIND TUNNEL (B) VA352	T T

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2155	OA110	134,406		B61C11F12M51W124E4O	NRLAD - LOW SPEED WIND TUNNEL - 721	F5
2157	IH19	141,822		ORBITER WITH EXTERNAL TANK	LARC - HYPERSONIC NITROGEN TUNNEL - 28	QE
2159 V-01	OA59	134,410		140 A/B SSV ORBITER	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 709	ER
2159 V-02	OA59	134,412		140 A/B SSV ORBITER	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 709	ER
2162	DA36	134,430		140 A/B, VEHICLE 4	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 187	EP
2163	OA2OB	134,403		140A/B	LARC - UNITARY PLAN WIND TUNNEL - 1097	Q2
2164 V-02	0H12 IH21	141,829		EXTERNAL TANK	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL - 173-100	UG
2167	OA98	141,550		140A/B	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 190	EQ
2171 V-01	OH38	144,584		140C ORBITER	ARC 3.5-FOOT HYPERSONIC WIND TUNNEL 198	EZ

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2171 V-02	0Н38	144,585		140C ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 198	EZ
2171 V-03	0Н38	144,586		140C ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 198	EZ
2172	0 99	134,415		SSV ORBITER CONF. 2 (MODEL 21-0 OF VL70-000139)	LARC - 60-FOOT VACUUM SPHERE VON KARMAN F ACILITIES - R3289	Н7
2176	LA40		72661	139B ORBITER	LARC - 22-INCH HELIUM TUNNEL - 426	нз
2177	0A83	141,510		140A/B SSV ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 194	EW
2178	OA53B	134,119		140A/B	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 747	EK
2179	OS8A/B	151,378	÷	SS ORBITER LOWER WING CARRY-THROUG H STRUCTURE WITH A DUMMY PANEL , A	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 705 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	EX
2182	LA49	151,062	: ;	O89B/139	LARC - UNITARY PLAN WIND TUNNEL - 1101	HJ
2183	LA51		72661	140A/B	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 684	нv

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2184	LA48	151,061		089B/140	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 680	ні
2185	OA53C	134,120		140A/B	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 747	EL
2186	OA 116	134,428		.015-SCALE ORBITER MODEL,CONFIGURA TION 140A/B (49-0)	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 686	ни
2187	OA 1 19A	134,421		140A/B SPACE SHUTTLE ORBITER INNER MOLD LINE CONFIGURATION, (MODEL 1	NRLAD - LOW SPEED WIND TUNNEL - 726	FB
2190	OA 108	141,537		O.004-SCALE ORBITER FORCE MODEL (7	MSFC - 14-INCH TRISONIC WIND TUNNEL - 599	1D
2191	LA47		72661	140A/B	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 104	нн
2193	0H26	151,380		SS ORB. 140B MODEL (MODIFIED 22-0)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 199	E2
2195	0A82	134,442		ORBITER CONFIG. 3	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 113	HL
2196	0A79	141,531		ORBITER 140A/B	AEDC - HYPERSONIC WIND TUNNEL (B) - 71A	TW
2198	OA 1 15	141,534	•	ORBITER 140A/B	AEDC - SUPERSONIC WIND TUNNEL (A) - 71A	τv

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2202	OA 123	141,526		140A/B OUTER MOLD LINE CONFIGURATI ON	NRLAD - LOW SPEED WIND TUNNEL 731	FA -
2203	OA 119B	141,524		140C OUTER MOLD LINE CONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL 730	F9
2205	OA 109	141,532		RI SPACE SHUTTLE ORBITER VEHICLE 4 (MODIFIED) CONFIGURATION	LARC - 22-INCH HELIUM TUNNEL 431	HE -
2209	OA124	141,536		MODEL 43-0	NRLAD - LOW SPEED WIND TUNNEL 736	FB
2211 V-01	CA5	141,800		O.O3-SCALE 45-O (ORBITER) MODEL	TBCA - TRANSONIC WIND TUNNEL 1431	GM -
2211 V-02	CA5	141,803		O.O3-SCALE 45-O (ORBITER) MODEL	TBCA - TRANSONIC WIND TUNNEL 1431	GM -
2211 V-03	CA5	141,804		O.O3-SCALE 45-O (ORBITER) MODEL	TBCA - TRANSONIC WIND TUNNEL 1431	GM -
2214	0A89	141,513		140C MODIFIED SPACE SHUTTLE ORBITE R MODEL 74-0	LARC - HYPERSONIC NITROGEN TUNNEL 30-31	QD -
2215	LA58	144,592	ı	SSV ORBITER CONFIGURATION 140A/B-O .015 SCALE	LTV - HIGH SPEED WIND TUNNEL 512	нү
2220 V-08	LA52		72661	140 A/B SPACE SHUTTLE ORBITER	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 6458	HN -

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2221	OA143	141,548		140C CONFIGURATION ORBITER (MODEL 16-0)	NRLAD - LOW SPEED WIND TUNNEL 737	FC -
2222 V-01	OH49B	147,626		B25C10M4F10E26R5V7W,116	AEDC - HYPERSONIC WIND TUNNEL (B) 57A	V1 -
2222 V-02	OH49B	147,627		B25C10M4F10E26R5V7W116	AEDC - HYPERSONIC WIND TUNNEL (B) 57A	- V1
2225	OH4C	141,505		MODEL 21-0, LINES VL70-000139	AEDC - HYPERSONIC WIND TUNNEL (B) VA352	тz
2229	OA 102	141,508		SSV 140A/B	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 687	HM -
2232	OA131	141,521		MODEL 74-O, CONF. 4	MSFC - 14-INCH TRISONIC WIND TUNNEL 607	1M -
2233	LA59	151,068		72-OTS (B26C9E44F10FL10/11M16N28/8 6PS1-SR5S21T2,V8W116	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 703	HZ [*]
2234	OA113	141,547		ORBITER WITH ELEVON AND BODY FLAP DEFLECTIONS	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 184-220	UH -
2238	0A93	141,847		51-0	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 184-120	- UI
2241 V-01	0H39	160,490	!" - 4n	MODEL 60-3, VEH. 4	AEDC - Hypersonic wind tunnel (B) 74A	V9 -

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2241 V-02	0Н39	160,491		MODEL 60-3, VEH. 4	AEDC - HYPERSONIC WIND TUNNEL (B) - 74A	۸a
2241 V-03	0H39	160,492		MODEL 60-3, VEH. 4	AEDC - HYPERSONIC WIND TUNNEL (B) - 74A	V9
2241 V-04	0Н39	160,493	÷	MODEL 60-3, VEH. 4	AEDC - HYPERSONIC WIND TUNNEL (B) - 74A	V9
2245 V-01	OA161A/B/C	147,618	·	SPACE SHUTTLE VEHICLE ORBITER 140A /B (MODIFIED)	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 094	E7
2245 V-02	OA161A/B/C	147,619		SPACE SHUTTLE VEHICLE ORBITER 140A /B (MODIFIED)	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 094	E7
2246	LA65	144,600		WING-BODY WITH VARIATIONS	ARC - 12-FOOT PRESSURE TUNNEL - 086	NC
2247	OA 160	141,834		MODEL 51-0 OF MODIFIED VEH. 4 ORB. (B26 C9 E26 F7 M7 N28 R5 V8 W116)	AEDC - HYPERVELOCITY WIND TUNNEL (F) - 28A	VA
2250	OH43	141,539		15-O.FLAT PLATE MODEL	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 182	ND
2251	0Н9	141,540		MDDEL 29-0/VL70-006139	AEDC - HYPERSONIC WIND TUNNEL (B) - VA353	V5

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2252	0H25A	141,546		ORB.; 40(SEMISPAN; BODY FLUSH; LE AD. EDGE; TRANSITION; SEMISPAN WING	AEDC - HYPERSONIC WIND TUNNEL (B) - 83A	V6
2254 V-01	OA148 OA148P	144,619		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-02	OA148 OA148P	144,620		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-03	OA148 OA148P	144,621		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 073	E8
2254 V-04	OA148 OA148P	144,622		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	EB
2254 V-05	OA148 OA148P	144,623		VEHICLE 5 ORBITER	ARC - 11-FDOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-06	OA148 OA148P	144,624		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 073	E8
2254 V-07	OA148 OA148P	144,625	:	VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8

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2254 V-08	OA148 OA148P	144,626		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-09	OA 148 OA 148P	144,627		VEHICLE 5 ORBITER	ARC 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 073	E8
2254 V-10	OA148 OA148P	144,628		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-11	OA 148 OA 148P	147,601		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-12	OA148 OA148P	147,602		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2254 V-13	OA 148 OA 148P	147,603		VEHICLE 5 ORBITER	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 073	E8
2257	LA69	151,369		OUTER MOLD LINE MODEL 72-OTS	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 714	J9
2259	LA6OA			TASK CANCELLED, MAY 1977	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 704	J1

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2261 V-01	DA 100	167,364		ORBITER VEHICLE 101 WITHOUT TAILCO NE	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL - 462	NA
2261 V-02	OA 100	167,365		ORBITER VEHICLE 10,1 WITHOUT TAILCO NE	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL - 462	NA
2263	0H74	144,596		140 C ORB (B62 C12 E52 F10 M16 R19 V8 W127)	AEDC - HYPERSONIC WIND TUNNEL (B) BBA	VB
2264	LA62	141,843		SSV ORBITER 49-0 MODIFIED	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 717	J3
2265	OA 159	141,832		CONFIG 1 ORBITER WITH NOSE AND TAI L RCS JETS	ARC - 12-FOOT PRESSURE TUNNEL - 078	NG
2266	LA67	144,607		140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	LTV - HIGH SPEED WIND TUNNEL - 552	FD
2267 V-01	MA22	147,604		REACTION CONTROL SYSTEM	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 118	JA
2267 V-02	MA22	147,605		REACTION CONTROL SYSTEM	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 118	JA
2267 V-03	MA22	147,606		REACTION CONTROL SYSTEM	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 118	JA

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2267 V-04	MA22	147,607		REACTION CONTROL SYSTEM	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 118	JA
2268 V-01	CA9 CA9P	151,396		ORBITER 47-0	TBCA - TRANSONIC WIND TUNNEL - 1477	GQ
2268 V-02	CA9 CA9P	151,397		ORBITER 47-0	TBCA - TRANSONIC WIND TUNNEL - 1477	GQ
2268 V-03	CA9 CA9P	151,398		ORBITER 47-0	TBCA - TRANSONIC WIND TUNNEL - 1477	GQ
2268 V-04	CA9 CA9P	151,399		ORBITER 47-0	TBCA - TRANSONIC WIND TUNNEL - 1477	GQ
2268 V-05	CA9 CA9P	151,400		ORBITER 47-0	TBCA - TRANSONIC WIND TUNNEL - 1477	GQ
2269	LA70	147,624		140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	CALSPAN - 8-FOOT TRANSONIC WIND TUNNEL - T18-103	UK
2270	LA63A	144,579		ORBITER W/ INDEPENDENTLY-OPERATED LEFT,RIGHT ELEVON SURFACES	LARC - UNITARY PLAN WIND TUNNEL - 1118	J4
2271	LA71A/B	151,044		MODEL 69-O WITH FOREBODY RSI MODS	LARC - UNITARY PLAN WIND TUNNEL - 1147 1132	JC
2273 V-01	CA26	144,612		48-0 (02, 04, 06, S1, ATY, ATX)	LTV - HIGH SPEED WIND TUNNEL - 559	FE

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2273 V-02	CA26	144,613		48-0 (02, 04, 06, S1, ATY, ATX)	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2273 V-03	CA26	144,614		48-0 (02, 04, 06, \$1, ATY, ATX)	LTV - HIGH SPEED WIND TUNNEL 559	· FE
2273 V-04	CA26	144,615		48-0 (D2, D4, D6, S1, ATY, ATX)	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2273 V-05	CA26	144,616		48-0 (02, 04, 06, S1, ATY, ATX)	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2275 V-01	CA23B	144,603		O.0125-SCALE 747 MODEL	ARC - 14-FOOT TRANSONIC WIND TUNNEL 120	NH -
2275 V-02	CA23B	144,604		O.0125-SCALE 747 MODEL	ARC - 14-FOOT TRANSONIC WIND TUNNEL 120	NH -
2278	LA61			TEST CANCELLED, MAY 1976	LARC - LOW-TURBULENCE PRESSURE TUNNEL 219	J2 -
2279	LA63B	144,606		140A/B/C (B26 C9 E43 F8 M16 N28 R5 V8 W)	LARC - UNITARY PLAN WIND TUNNEL 1151	J4 -
2280	LA28	144,582		FLAT-PLATE MODEL WITH THIN-FILM H EAT FLUX GAGES	LTV HIGH SPEED WIND TUNNEL 498	QB -
2281	LA66	147,621		BASELINE	ARC - 12-FOOT PRESSURE TUNNEL 135-1	NJ -

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2283	MA 14	147,649		ORBITER 089B	LTV - LOW SPEED WIND TUNNEL - 422	FG
2285	OH5OA	144,595		82-0, WITH AND WITHOUT PROTUBERANC ES, 50% FOREBODY MODELS	AEDC - HYPERSONIC WIND TUNNEL (B) - VA526/21BA	VE
2286	0A22O	147,625		SSV ORBITER (MODEL 57-0) FOREBODY WITH TPS TILES ALONE	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 150-1	NL
2288	0H64	151,384		BASE HEATING MODEL 25-0	LERC - SPACE POWER FACILITY -	GG
2289 V-01	OA163	147,611		SPACE SHUTTLE ORBITER 140C	NRLAD - LOW SPEED WIND TUNNEL - 751	FF
2289 V-02	OA 163	147,612		SPACE SHUTTLE ORBITER 140C	NRLAD - LOW SPEED WIND TUNNEL - 751	FF
2289 V-03	OA 163	147,613		SPACE SHUTTLE ORBITER 140C	NRLAD - LOW SPEED WIND TUNNEL - 751	FF
2289 V-04	OA 163	147,614		SPACE SHUTTLE ORBITER 140C	NRLAD - LOW SPEED WIND TUNNEL - 751	FF
2290 V-01	CAB	147,641		747 ALONE	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL - 129	JF
2290 V-02	CAB	147,642		747 ALONE	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL - 129	JF

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2290 V-03	CAB	147,643		747 ALONE	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL - 129	JF
2294 V-01	OA172	160,822		140A/B SS ORBITER (MODEL 43-0) ORB ITER FERRY CONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL - 752	FG
2294 V-02	OA172	160,823		140A/B SS ORBITER (MODEL 43-0) ORB ITER FERRY CONFIGURATION	NRLAD - LOW SPEED WIND TUNNEL - 752	FG
2296 V-01	LA81	147,609		.03614-SCALE ORBITER MODEL OF A 08 9B CONFIGURATION WITH A 139B CONFI	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 229	JP
2296 V-02	LA81	147,610		.03614-SCALE ORBITER MODEL OF A 08 9B CONFIGURATION WITH A 139B CONFI	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 229	JP
2297	LA45A/B	147,628		WING	LARC - UNITARY PLAN WIND TUNNEL - 1145	НВ
2298	LA73A LA73B	151,409		SSV ORBITER MODEL 69-0	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 227 LOW-TURBULENCE PRESSURE TUNNEL - 238	JE
2300	LA61B	147,629		140A/B/C (B26 C9 E43 F8 M16 N28 R5 V8 W)	LARC - LOW-TURBULENCE PRESSURE TUNNEL	JT
2301	OH54A	144,605		MODELS 82-1, -3, -5, -8, -11, ALL 50 PERCENT FOREBODIES	AEDC - HYPERSONIC WIND TUNNEL (B) - 82A	VH

DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2302 V-01	OA174	167,340		ORBITER VEHICLE 101 WITH TAIL CONE	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL - 479	NO
2302 V-02	OA174	167,341		ORBITER VEHICLE 101 WITH TAIL CONE	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL - 479	МО
2303	0Н75	144,618		MODELS 82-1, -4, 50 PERCENT FOREBO DIES	AEDC - HYPERSONIC WIND TUNNEL (B) - E3A	VG
2304	OA 173	160,846		TAILCONE-ON	ARC - 12-FOOT PRESSURE TUNNEL - 180-1	NS
2305 V-01	LA76	151,059		B26C9E43F8M16N28R5V8W	LTV - HIGH SPEED WIND TUNNEL - 573	FI
2305 V-02	LA76	151,060		B26C9E43F8M16N28R5V8W	LTV - HIGH SPEED WIND TUNNEL - 573	FI
2307 V-01	CA 14A	160,840		BOEING 747 CAM/ORBITER - ALT CONFI GURATION ,	TBCA - TRANSONIC WIND TUNNEL - 1496 1497	GR
2307 V-02	CA14A	160,841	a	BOEING 747 CAM/ORBITER - ALT CONFI GURATION	TBCA - TRANSONIC WIND TUNNEL - 1496 1497	GR
2309	LA72	147,644	. 1 1	FOREBODY B1. B6, B7	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 740	JD

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2311	LA78 LA87 LA88	147,620		B58C5E18F4R5V5W87-VEHICLE 2A (MODI FIED)	LARC - FREON TUNNEL 267-268 22-INCH HELIUM TUNNEL 446	J5 -
2314	OA 176	151,406		LANDING	NRLAD - LOW SPEED WIND TUNNEL 754	FJ -
2317	OH53A	151,78 7		O.O4-SCALE (83-O)ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 216	NV -
2318 V-01	LA75	147,646		ORBITER-140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	LARC - UNITARY PLAN WIND TUNNEL 1173	JH -
2318 V-02	LA75	147,647		ORBITER-140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	LARC - UNITARY PLAN WIND TUNNEL 1173	JH ~
2320 V-01	OA 169	151,390		ORBITER 0.0125 70-0T	AEDC - HYPERSONIC WIND TUNNEL (B) D8A	V J
2320 V-02	OA 169	151,391		ORBITER 0.0125 70-0T	AEDC - HYPERSONIC WIND TUNNEL (B) D8A	- VJ
2320 V-03	OA 169	151,392		ORBITER 0.0125 70-0T	AEDC - HYPERSONIC WIND TUNNEL (B) D8A	VJ
2321 V-01	0 H69	151,410		ORBITER VEHICLE FOREBODY	AEDC - HYPERSONIC WIND TUNNEL (B) V41B-E9A	- VM

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2321 V-02	0H69	151,411		ORBITER VEHICLE FOREBODY	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-E9A	VM
2322	OA228	160,847		SPACE SHUTTLE ORBITER VEHICLE 102	NRLAD - LOW SPEED WIND TUNNEL - 757	FL
2329	OA224	160,837		SSV ORBITER (MODEL 57-0) FOREBODY W/ ADP, FTP, AND ADP AND FTP	LARC - 16-FOOT TRANSONIC TUNNEL - 312	JU
2330	0H52	147,637		CONF. 4, MODEL 29-0	AEDC - HYPERSONIC WIND TUNNEL (B) - 524	vo
2332	CA13	151,373		ORBITER- TAILCONE ON, TC23, STING MOUNTED	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 121	NZ
2333 V-01	0A175	151,374		O1+TC23'ALT' CONFIGURATION WITH TA ILCONE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UN1 TARY) - 187-1	2A
2333 V-02	OA 175	151,375		01+TC23'ALT' CONFIGURATION WITH TA ILCONE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 187-1	2 A
2333 V-03	OA 175	151,376		01+TC23'ALT' CONFIGURATION WITH TA ILCONE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 187-1	2 A
2336	LA145	167,375		LARC .0098-SCALE CAST ALUMINUM	LARC - UNITARY PLAN WIND TUNNEL - 1345 1390	7H ;

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2337	OA236	151,786		FLIGHT TEST PROBE CALIBRATION	NRLAD - LOW SPEED WIND TUNNEL - 759	FM
2340 V-01	0Н98	160,501		O.O175-SCALE THIN-SKIN THERMOCOUPL E SHUTTLE ORBITER 60-0	AEDC - HYPERSONIC WIND TUNNEL (B) - J7A	vs
2340 V-02	0Н98	160,502		O.0175-SCALE THIN-SKIN THERMOCOUPL E SHUTTLE ORBITER 60-0	AEDC - HYPERSONIC WIND TUNNEL (B) - J7A	vs
2342	OH54B	151,074		MODEL 82-0. 50% FOREBODY	AEDC - HYPERSONIC WIND TUNNEL (B) - 82A	. VM
2343	LA85	160,849		ATP ORBITER	LARC - 22-INCH HELIUM TUNNEL - 445	JY .
2344 V-01	LA77	151,788		ORBITER-140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 200-1	2B
2344 V-02	LA77	151,789		ORBITER-140A/B/C=B26 C9 E43 F8 M16 N28 R5 V8 W	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 200-1	28
2348 V-01	CA 15B	160,483		747-100 WITH CAM TYPE II KITS ATTA CHED	UW - LOW SPEED WIND TUNNEL 1178	GT
2349	CA 17	151,379		ORBITER B26.1C9E44F8M16R5V8W116	UW - LOW SPEED WIND TUNNEL 1184	GW -

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2350	OH46	151,065		140B ORB., MODEL 90-0	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL - 4502-4601	QR
2351	OA238	160,853		ORBITER 102 FOREBODY	NRLAD - LOW SPEED WIND TUNNEL - 764	FN .
235 2	LA91	151,383		ORBITER 140A/B/C B26C9E43F8M16N28 R5V8W	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 758	J6
2353	LA89	160,827		ALT	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 213-1	2 E
2355	OH49A	151,066		B17 C7 E22 F7 M4 W104	AEDC - SUPERSONIC WIND TUNNEL (A) - VA525/218A	. VW
2356	OH60	151,064		MODEL 83-0 (B60 C10)	AEDC - HYPERSONIC WIND TUNNEL (B) - B7A	VU
2358	0H50B	151,067		FORWARD 50 PERCENT FUSELAGE, MODEL 83-0	AEDC - HYPERSONIC WIND TUNNEL (B) - 58A	VL
2359	OH66	151,405		ROCKWELL VEHICLE 3 (MODIFIED) SHUT TLE ORBITER. MODEL 66-0	CALSPAN - 96-INCH HYPERSONIC SHOCK TUNNEL - 131	UO

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2360 V-01	OA221B/C	160,521		ORBITER VEHICLE 102 FOREBODY	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 119-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 119	21
2360 V-02	0A221B/C	160,522		ORBITER VEHICLE 102 FOREBODY	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 119-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 119	21
2361 V-01	OA 163B	151,370		B68C12E55F1OM16N28R5V8W127X9	NRLAD - LOW SPEED WIND TUNNEL - 768	FP.
2361 V-02	OA163B	151,371		B68C12E55F1OM16N28R5V8W127X9	NRLAD - LOW SPEED WIND TUNNEL - 768	FP
2363	057	151,057		55-0 (FIN, RUDDER)	LARC - TRANSONIC DYNAMICS TUNNEL - 246	HR
2364 V-01	OA 145B	160,527		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R2OV27VT10VT11VT12VT13VT14	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 118-1	G2
2364 V-02	OA145B	160,528		B75C16E64F16FD3FR22HG1M52N108N109N 1.10N111R2QV27VT10VT11VT12VT13VT14	ARC - 9-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 118-1	G2

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2364 V-03	OA 145B	160,529		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 118-1	G2 -
2365	0\$6	151,056		MODEL 54-O	LARC - TRANSONIC DYNAMICS TUNNEL 246	HR -
2366	OH25B	151,063		140C (B17C7E22F5M4R5V7W103	AEDC - HYPERSONIC WIND TUNNEL (B) 41B-83A	· VY
2367	OH57A/B	151,773		MODEL 91-0 ORBITER 102, DRWG VC- 70-000002B	AEDC - HYPERSONIC WIND TUNNEL (B) V41B-K3A	- 4A -
2368	OH5 1	151,058		MODELS 46-0, 64-0 90-0	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 112	HD -
2370 V-01	OA149B/C	151,790		B70C9E44F9M16N28R5V8W116(ORBITER)	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 115-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 115-1	2K
2370 V-02	0A149B/C	151,791		B70C9E44F9M16N28R5V8W116(ORBITER)	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 115-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 115-1	2К

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2370 V-03	OA149B/C	151,792		B70C9E44F9M16N28R5V8W116(ORBITER)	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 115-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 115-1	2K
2371	0H78	151,408		ORBITER VEHICLE 102	JSC - 56-A-76	GN
2373	LA99	160,821		LARC BUILT MODEL 201-0 0.030 SCALE SSV ORBITER WITH REMOTE ELEVONS	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 769	K9
2374	LA82 LA103	167,372		B2OF4M16W87E19V5R5TC4	CALSPAN - 8-FOOT TRANSONIC WIND TUNNEL - T18-111 T18-113	UN
2375	OA237	160,530		ORBITER VEHICLE 102 FOREBODY	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL - 500	2M
2376 V-01	OA 149A	151,779		B70C9E44F9M16N28R5V8W116(ORBITER)	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 115	2K
2376 V-02	OA 149A	151,780		B70C9E44F9M16N28R5V8W116(ORBITER)	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 115	2K
2376 V-03	OA 149A	151,781	. 1	B70C9E44F9M16N28R5V8W116(ORBITER)	ARC 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 115	2K

DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2380 V-01	OA 145A	151,801		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 118-1	2 F
2380 V-02	OA145A	151,802		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 118-1	2 F
2380 V-03	OA 145A	151,803		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 118-1	2F
2380 V-04	OA 145A	151,804		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 118-1	2 F
2380 V-05	OA 145A	151,805		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 118-1	2F
2380 V-06	OA 145A	151,806		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 118-1	2 F
2381	LA107			TEST CANCELLED SEPTEMBER 1978	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 780	KF
2382	ОН8 I A 109	151,382		MODEL 25-0 (VEH. 2A AFT OF STA. XO = 1400 AND PROP. SIMULATION SYS.)	MSFC - NASA/MSFC IMPULSE BASE FLOW FACILI TY - 027	1U

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2385	OH15	151,366		MODEL 53-0 (ELEVON/WING GAP)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 173	ED .
2386	OH44	151,368		MODEL 53-0 (ELEVON/ELEVON GAP)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 177	ЕН
2387	LA 104			TEST CANCELLED SEPTEMBER 1978	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 246	KA
2388	OH84A	167,676		MODEL 83-0 (O.O4-SCALE)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-R4A	4E
2389 V-01	OA 145C	160,810		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R2OV27VT10VT11VT12VT13VT14	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 118-1	2H
2389 V-02	OA 145C	160,811		B75C16E64F16FD3FR22HG1M52N10BN109N 110N111R2OV27VT10VT11VT12VT13VT14	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 118-1	2Н
2389 V-03	OA 145C	160,812		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R2OV27VT10VT11VT12VT13VT14	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 118-1	2H
2390	LA 101	160,481		MODEL 44 O SSV ORBITER WITH REMOTE CONTROLLED ELEVONS	LARC - UNITARY PLAN WIND TUNNEL - 1194	KD
2392	0A250	151,389		MODEL 45-0 ORB, 140A/B CONF. (MODI FIED)	NRLAD - LOW SPEED WIND TUNNEL - 775	FQ

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23 95	LA111	151,394		MODEL 44-0 (SILTS POD)	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 786	KJ
2396	LA110	151,393		MODEL 44-0 (SILTS POD)	LARC - UNITARY PLAN WIND TUNNEL - 1212	KI
2399	LA114	151,388		MODEL 44-0 (SILTS POD)	LARC - UNITARY PLAN WIND TUNNEL - 1217	кк
2400	OA234	160,518		ORBITER VEHICLE 102 FOREBODY	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 042	GY
2402	OA223	151,763		B75C16F64F16FD3FR22HG1M52N108N109N 110N111R2OV27VT10VT11VT12VT13VT14	NRLAD - LOW SPEED WIND TUNNEL - 766	FO
2405 V-01	OA 101	151,756		0V102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	20
2405 V-02	OA 101	151,757		0V102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	20
2405 V-03	OA 101	151,758		0V102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	20
2405 V-04	OA 101	151,759		0V 102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	2 Q
2405 V-05	OA101	151,760		DV 102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	2 Q

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2405 V-06	OA 10 1	151,761		0V102	ARC - 12-FOOT PRESSURE TUNNEL - 218-1	20
2409	LA115	160,842		ORBITER	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 803	KL
2410	0H56	151,777		ORBITER WING TIP (MODEL 91-0)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-R3A	нт
2414 V-01	UA232	160,484		B74C16N108PR4PR7PR8PR14VT18VT19	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 431	VR
2414 V-02	OA232	160,485		B74C16N108PR4PR7PR8PR14VT18VT19	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 431	VR
2415 V-01	0A208/209	151,784		SSV 102 ORBITER CONFIGURATION MODE L 105-0	AEDC - SUPERSONIC WIND TUNNEL (A) - V41B-P5A	41
2415 V-02	0A208/209	151,785		SSV 102 ORBITER CONFIGURATION MODE L 105-0	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-P5A	4J
2417	0H58	151,770		93-0 FLAT PLATE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 235	2X
2419	0A270B/C	151,762		SSV 0V102 ORBITER CONFIGURATION MO DEL 104-0 INSTRUMENTED ELEVONS	LARC - 16-FOOT TRANSONIC TUNNEL - 325	КР

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2420	OH1O3A	167,385		MODEL 83-0 LINES VL70-000140C	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-V2A	4H
2421 V-01	0A251B/C	160,495		99-0	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 282-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	2Z
2421 V-02	0A251B/C	160,496		99-0	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 282-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	27
2424 V-01	OA126A,B,C	160,506		B62C9E64F9M16RSV8W131N112FD3N28	ARC 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL 289-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY)	2Y
2424 V-02	OA126A,B,C	160,507		B62C9E64F9M16RSV8W131N112FD3N28	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 289-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	2Y
2424 V-03	OA126A,B,C	160,508		SSV 102 ORBITER CONFIGURATION 47-0	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 289-1	зн
2426	LA124		TP1186	140A/B ORBITER	LARC - UNITARY PLAN WIND TUNNEL - 1207 LG2	KR

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2427	0H103B	167,675		MODEL 60-0; LINES VL70-000140C	AEDC - HYPERSONIC WIND TUNNEL (B) V41B-V2C	4M -
2430 V-01	0A270A	160,817		OV102(MODEL 39-0)	LARC - 16-FOOT TRANSONIC TUNNEL 326	KN -
2430 V-02	0A270A	160,818		OV102(MODEL 39-0)	LARC - 16-FOOT TRANSONIC TUNNEL 326	KN
2430 V-03	0A270A	160.819		OV102(MODEL 39-0)	LARC - 16-FOOT TRANSONIC TUNNEL 326	KN
2432	LA 125	160,845		0V102 (105-0)	LARC - Unitary plan wind tunnel 1243	ks -
2433	OA 171	151,764		O.O2 SCALE ORBITER VEHICLE 102 (MO DEL 105-0), MODIFIED MODEL 89-0	NSWC - 1310	GJ
2434	OA 129	151,782		ORBITER (47.0) OV102 WITH RIGID AN D FLEXIBLE TAIL	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) 507	4N -
2436 V-06	LA 126		72661			КT
2443	0H79	151,769		65-0 SS ORBITER BASE HEATING MODEL	JSC - 61-A-78	5A
2445 V-01	OA 146	167,652		SSV 14DA/B/C/R ORBITER	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 318-1	3G -

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2445 V-02	OA 146	167,653		SSV 14DA/B/C/R ORBITER	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 318-1	3 G
2450	0S4A 0S4B 0S12	151,774			ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 041,154,11 6	зү
2451	OH9OA/MA29	151,772			AEDC - HYPERSONIC WIND TUNNEL (B) - P4A	45
2454 V-03	LA57		72661	140A/B ORBITER-BASELINE	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 114	нх
2455	0H102A	151,778		140C ORBITER WITH SLAB SIDED VERTI CAL TAIL	AEDC - HYPERSONIC WIND TUNNEL (B) - 41B-65	4 T
2458	0\$36/37	167,668		HRSI TILE PANEL	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 369-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	3L
2459 V-01	0A310A 0A310B 0A310C	167,685		AFRSI SSV PRESSURE-LOADS MODEL 84- O	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 587-1	A2

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2459 V-02	0A310A 0A310B 0A310C	167,686		AFRSI SSV PRESSURE-LOADS MODEL 84- O	LERC - 8 BY 6-FOOT SUPERSONIC WIND TUNNEL - 046 /LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 074	Α4
2463	0541 0542 0545	167,672		107-0 LRSI TILE PANEL	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 380-1 381-1	30
2464 V-01	0H84B	160,828		B62C12ES2F10M16V3OW127 (56-0)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-67	4U
2464 V-02	OH84B	160,829		B62C12ES2F10M16V30W127 (56-0)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-67	4 U
2464 V-03	0H84B	160,830		B62C12ES2F1OM16V3OW127 (56-0)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-67	4U
2464 V-04	OH84B	160,831		B62C12ES2F10M16V30W127 (56-0)	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-67	4U
2464 V-05	0H105	160,832		B62C12E52F1OM16R18V8W116T38S26 (6 O-0) .	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-67	4V
2465	0\$55/57	167,674		81-0 HRSI TILE PANEL	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 464	AJ

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2466 V-01	OA257	167,663		B75,C16,E64,F16,M52,N108,N110,N111,R20,V27,W131	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 6559	7E
2466 V-02	0A257	167,664	4	B75,C16,E64,F16,M52,N108,N110,N111,R20,V27,W131	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 6559	7E
2468	ОН105B ОН84C	167,352		ORBITER	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 247 246	зк
2469	OS302A	167,367			ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 503-1	AL
2470	OS31A	167,658		LRSI (THIN TILE)	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 145-1	A 1
2472	0H400	160,494		B75C16E64F16M52W131V29	AEDC - SUPERSONIC WIND TUNNEL (A) - V41B-65	4X
2473 V-01	0A252	167,388		TPS TILE CAVITY FLOW FIELD MODEL	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL 382-1	3T
2473 V-02	OA252	167,389		TPS TILE CAVITY FLOW FIELD MODEL	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL 382-1	зт
2477	LA141A/B	160,825		ORBITER 74-0	LARC - 20-INCH HYPERSONIC TUNNEL (MACH 6) - 6546	ΚZ

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2478 V-01	LA131	160,503		B75C16E64F16FR22HG1M52N108N109N110 N111R20V27	LARC - UNITARY PLAN WIND TUNNEL - 1299	7 A
2478 V-02	LA131	160,504		B75C16E64F16FR22HG1M52N108N109N110 N111R20V27	LARC - UNITARY PLAN WIND TUNNEL - 1299	7 A
2478 V-03	LA131	160,505		B75C16E64F16FR22HG1M52N108N109N110 N111R20V27	LARC - UNITARY PLAN WIND TUNNEL - 1299	7A
2482 V-01	OA400	160,814	·	ORBITER - 470	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 427-1 427-2	ЗХ
2482 V-02	DA400	160,815		ORBITER - 470	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 427-1 427-2	3х
2482 V-03	DA400	160,816		ORBITER - 470	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 427-1 427-2	зх
2483 V-01	0S49	167,357		i i	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) TF-556	T5
2483 V-02	0549	167,358			AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) TF-556	T5 :

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2485	0S50 0S50A	167,361		CALIBRATION PANEL	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 425 425-1	AC
2486 V-01	OA253	167,368		B64C14E63F14M18N92N94R18U2V23W129	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 572	4 Y
2486 V-02	OA253	167,369		B64C14E63F14M18N92N94R18U2V23W129	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 572	4 Y
2487	0\$43 0\$51 0\$51B 0\$51C	167,362		HRSI TILED PANEL	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 380-1 436-1.3	АМ
2488	0 \$300	160,835		AFRSI PANEL	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 458	ΑE
2489	0556	167,366			AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - TF-608	Т8
2490 V-01	OH109	167,349		56-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	42
2490 V-01	OH109	167,349		60-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	42

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2490 V-02	ан109	167,350		56-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	4Z
2490 V-02	0H109	167,350		60-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	4Z
2490 V-03	0H109	167,351		60-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	42
2490 V-03	OH109	167,351		56-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-G9	4 Z
2491 V-01	OA258	167,659		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14V	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-HO	T1
2491 V-02	OA258	167,660		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14V	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-HO	T1
2491 V-03	OA258	167,661		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14V	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-HO	T1
2491 V-04	OA258	167,662		B75C16E64F16FD3FR22HG1M52N108N109N 110N111R20V27VT10VT11VT12VT13VT14V	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-HO	. T1
2492	0H107	167,359		OV-102 (RIGHT HAND WING AND TRUNCA TED AFT FUSELAGE)	AEDC - HYPERSONIC WIND TUNNEL (B) V43B-17	Т2
2493 V-01	OA259	167,665		B75,C16,E64,F16,M52,N108,N109,N110,N111,R20,V27,W131	AEDC - HYPERSONIC WIND TUNNEL (B) - V42B-145 V43B-14	Т3

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2493 V-02	OA259	167,666		B75,C16,E64,F16,M52,N108,N109,N110,N111,R20,V27,W131	AEDC - HYPERSONIC WIND TUNNEL (B) - V42B-145 V43B-14	тз
2494	0H108	167,360		OV-102 ELEVON GAP	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 254	АН
2495	0H110	160,844		60-0	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 253	AG
2495	OH110	160,844		56-0	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 253	AG
2496 V-01	OH111	167,380		O.0175-SCALE 56-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-1C	Т6
2496 V-02	OH111	167,381		0.0175-SCALE 56-0	AEDC + HYPERSONIC WIND TUNNEL (B) - V41B-1C	Т6
2496 V-03	OH111	167,382		O.0175-SCALE 56-0	AEDC - HYPERSONIC WIND TUNNEL (B) - V41B-1C	Т6
2498	0A255 0A256	167,656		102 (PRELIMINARY)	LARC - UNITARY PLAN WIND TUNNEL - 1311 16-FOOT TRANSONIC TUNNEL - 1358	7B
2499	OA164	160,836		B69C14DT1E54F14FD1FD2FR12HA1HG1M18 N92N94N107PR1R18V23VT1VT2W129	ARC - 40-FOOT BY 80-FOOT SUBSONIC WIND T UNNEL 473	NM

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DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2500	05301	160,848		115-0 AFRSI MATERIAL PANELS	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 467-1	AK
2501	OS304A	167,373			ARC - 11-FOOT TRANSONIC WIND TUNNEL (UN1 TARY) - 501-1	АР
2502	0S304B	167,378			ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 501-1	AQ
2503	0S53A 0S53B	167,363		20A .	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 905,6,7,9	7C
2504	0\$302B	167,379			ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 503-1	AO
2505	OS46A-G	167,376			AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - TF-551	71
2506	0\$60,1,2,3	167,384			ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 500.07.31	AS
		* * * * * * * * * * * * * * * * * * *			9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	

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2507	B \AEEAM	167,683	·	ORBITER MODEL 106-0	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 510-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	ΔU
2508	0S306A/B	167,650		FIXTURE 96-0	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 548-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	AV
2509	0A307A/B	167,654		FLAT PANEL W/FRCI-12 TILES	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 549-1 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	AW
2510	AEOEZO	167,651			ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 548-1	AY
2512	0A308	167,667		122-0	ARC - 2-FOOT BY 2-FOOT TRANSONIC WIND TU NNEL - 542-1	AX
2513	05313	167,678		MODEL 129-0	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - TF645	АЗ
2515	0\$305-1/5	167,684		MODEL 125-0, AFRSI BONDED TO SUPPORT PLATE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 562-1/5	Α7

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2516	05311	167,688		MODEL 127-0, AFRSI BONDED TO SUPPO RT PLATE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 562-2/5	A8
2517	OS314A/B/C	167,689		AFRSI BLANKET PANELS FORM-FITTED OVER A TWO-DIMENSIONAL MODEL OF AN	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 582-1	A9
2519	0A309	167,692		140C SPACE SHUTTLE ORBITER	NRLAD - LOW SPEED WIND TUNNEL - 838	D2

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2006	IA1A	120,088		MSFC/NR PARAMETRIC	LAUNCH VEHICLE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 556	77
2010	IA1B	120,060		NR ATP ORBITER/TANK D OFF	AND SRMS ON AN	MSFC - 14-INCH TRISONIC WIND TUNNEL - 545	. 72
2011	MA9F	120,089		NR ATP ORBITER/EXTE RBS	RNAL TANK AND S	MSFC - 14-INCH TRISONIC WIND TUNNEL - 558	78
2013	IA2	128,762		SHUTTLE ORBITER/TAN	K SRM (N-040A)	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 616	BJ
2015 V-01	IA4	120,091		NASA SSV DRBITER ON INGLE BSRM	NR EOHT WITH S	LTV - HIGH SPEED WIND TUNNEL - 458	DE
2015 V-02	IA4	120,091		NASA SSV ORBITER ON INGLE BSRM	NR EOHT WITH S	LTV - HIGH SPEED WIND TUNNEL - 458	DE
2018	EAI	128,755		ATP LAUNCH CONFIGUR	ATION	NRLAD - LOW SPEED WIND TUNNEL - 693	DH
2024	IA7	128,766		O4OA SPACE SHUTTLE CLE	INTEGRATED VEHI	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 686	BL
2026	IA31F	128,778		MCR 0074 BASELINE L	AUNCH VEHICLE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 566	81

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2027 V-01	IA32FB	141,807		ORB. WITH ET AND 2 SRB'S	MSFC - 14-INCH TRISONIC WIND TUNNEL - 567	82
2027 V-02	IA32FB	141,808		ROB. WITH ET AND 2 SRB'S	MSFC - 14-INCH TRISONIC WIND TUNNEL - 567	82
2027 V-03	IA32FB	141,809		ORB. WITH 2 SRB'S	MSFC - 14-INCH TRISONIC WIND TUNNEL - 567	82
2028 V-01	IA31FB	134,434	•	MCR 0074 GRBITER LAUNCH	MSFC - 14-INCH TRISONIC WIND TUNNEL - 570	83
2028 V-02	IA31FB	134,436		MCR 0074 ORBITER LAUNCH	MSFC - 14-INCH TRISONIC WIND TUNNEL - 570	83
2032 V-01	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-02	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	B <i>-</i>

DMS DMS-DR-	NASA SERIES Number	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2032 V-03	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	8-
2032 V-04	IA9A,B,C DA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-05	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	B-
2032 V-06	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-07	IA9A,B,C DA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 707	В-

INTEGRATED VEHICLE DATA

DMS DMS-CR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2032 V-08	IA9A.B.C OA12A.C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	B-
2032 V-09	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-10	IA9A,B,C OA12A,C	128,794		17-0TS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707 -	В-
2032 V-11	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-12	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 707	B-

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2032 V-13	IA9A,B,C OA12A,C	128,794		17-0TS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-14	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-15	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-16	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2032 V-17	IA9A,B,C OA12A,C	128,794		17-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2032 V-18	IA9A.B.C OA12A.C	128,794		17-OTS .	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 707 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 707	В-
2039	IA6A	134,071		MODEL 2A ORBITER AND EXTERNAL TANK	MSFC - 14-INCH TRISONIC WIND TUNNEL - 571	85
2042	I A 52	134,087		MFSC MODEL NO 453	MSFC - 14-INCH TRISONIC WIND TUNNEL - 584	98
2048	IA12B	134,104		2A CONFIGURATION	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 710	BV
2062 V-01	IA13	134,117		INTEGRATED VEHICLE CONFIG 3 (MODEL 32-OTS)	AEDC - SUPERSONIC WIND TUNNEL (A) - VA323	TJ
2062 V-02	1413	134,118		INTEGRATED VEHICLE CONFIG. 3 (MODE L 32-OTS)	AEDC - SUPERSONIC WIND TUNNEL (A) - VA323	ΤJ
2062 V-03	IA13	141,801		INTEGRATED VEHICLE CONFIG. 3 (MODE L 32-OTS)	AEDC - SUPERSONIC WIND TUNNEL (A) - VA323	TJ
2063	1A37 1A48	128,788		INTEGRATED VEHICLE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 579/580	88
2064 V-01	IA36	141,814		INTEGRATED SSV 2A,3A MODIFIED	CALSPAN - 8-FOOT TRANSONIC WIND TUNNEL - T14-053	UF

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2064 V-02	IA36	141,816		INTEGRATED SSV 2A,3A MODIFIED	CALSPAN - 8-FOOT TRANSONIC WIND TUNNEL - T14-053	UF
2065 V-01	IA12C	141,518		2A CONFIGURATION	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 710	ВZ
2065 V-02	IA120	141,519		2A CONFIGURATION	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 710 .	вz
2065 V-03	IA12C	141,520		2A CONFIGURATION	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 710	вz
2070 [*]	LA23	128,787	٠	JSC 040A ORBITER WITH EHOT AND 2 S RM	LARC - LOW-TURBULENCE PRESSURE TUNNEL - 141	PU
2072	IA31FC	134,072		PRR BASELINE LAUNCH CONFIGURATION MCR 0074 BASELINE MODEL ELEMENTS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 573	90
2077 V-01	IA29 OA63	134,095		140A/B ORB., VEH. 4 ET, 2 SRB'S SHUTTLE ORBITER VENT PRESSURE MODE L 36-OTS	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 630	ЕВ
2077 V-02	IA29	134,099		140A/B ORB., VEH. 4 ET, 2 SRB'S	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL 630	EB

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR . NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2077 V-03	OA63	134,100		140A/B ORB., VEH. 4 ET, 2 SRB'S	ARC - 6-FOOT BY 6-FOOT SUPERSONIC WIND T UNNEL - 630	ЕВ
2078	IA10	128,795		MODEL 32-OT WITH ORBITER, ET, SIMU LATED ENGINE PLUMES	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 169	87
2084 V-01	IA14A	134,443		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B1
2084 V-02	IA14A	134,444		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B1
2084 V-03	IA14A	143,445		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 716	B 1
2084 V-04	IA14A	143,446		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 716	B1
2084 V-05	IA14A	143,447		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 716	B1
2084 V-06	14144	143,448		SSV 140A/B LAUNCH	ARC 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 716	B1 .

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2084 V-07	IA14A	143,449		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B 1
2084 V-08	IA14A	143,450		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	В 1
2084 V-09	IA14A	141,501		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B 1
2084 V-10	IA14A	141,502		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B 1
2084 V-11	IA14A	141,503		SSV 140A/B LAUNCH	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 716	B1
2085	0H10 IH2 ·	167,344		SPACE SHUTTLE INTEGRATED VEHICLE P RESSURE MODEL 26-OTS	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 171	В9
2093	IA37B	134,090		EXTERNAL TANK, T9 EXTERNAL TANK, T11	MSFC - 14-INCH TRISONIC WIND TUNNEL - 585	93
2098	IH15	134,096		B10C5D7F4M3V5W87 B10C5D7F4M3V5W87T8	ARC 3.5-FOOT HYPERSONIC WIND TUNNEL - 172	B8
2099 V-01	OH4B	134,419	·	22-OT	AEDC - HYPERSONIC WIND TUNNEL (B) - VA352	тк

INTEGRATED VEHICLE DATA

DMS DMS-DP-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2099 V-02	ОН4В	134,438		22-0T	AEDC - HYPERSONIC WIND TUNNEL (B) - VA352	TK
2099 V-03	ОН4В	134,439		22-OT	AEDC - HYPERSONIC WIND TUNNEL (B) - VA352	TK .
2100	OH3B	134,075		ORB.(VL70-000139)/ET (VL78-00041) AND ORB. ALONE RI ORBITER (VL70-000139)	AEDC - HYPERSONIC WIND TUNNEL (B) - VA289	TM
2105	IH17	144,594		ORBITER + EXTERNAL TANK, SSV MODEL 41-OTS EXTERNAL TANK ALONE, SSV MODEL 41- OTS	LARC - MACH 8 VARIABLE-DENSITY HYPERSONIC TUNNEL 646/647	PR -
2108	1A35 OA64	134,084		B26C9E26F8M7N25R5N116 B26C9E26F8M7N25R5N116S12T12	LARC - UNITARY PLAN WIND TUNNEL - 1063	Q4 -
2110	IH18	144,589		ORBITER CONFIGURATION 2A EXTERNAL TANK	LARC - FREON TUNNEL 97-118	QM -
2112	1A57	134,401		INTEGRATED VEHICLE (CONFIGURATION 3)	AEDC - SUPERSONIC WIND TUNNEL (A) VA422	TL -
2118	IA41	134,108		MATED INTEGRATED VEHICLE MODEL(67- OTS)	LARC F 8-FOOT TRANSONIC PRESSURE TUNNEL 667	Q8 -
2119	IA42A IA42B	134,109		CONFIGURATION 4 MATED SSV (67-OTS)	LARC - UNITARY PLAN WIND TUNNEL 1056/1073	Q6 -
2122	IA69	134,424		LAUNCH CONFIGURATION (MODEL 67-OTS)	NRLAD - 7-FOOT TRISONIC WIND TUNNEL 280	F3 -

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2123	IA53	141,504		LAUNCH CONFIGURATION LAUNCH CONFIGURATION WITH STRUTS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 588	96
2129 V-01	IA14B	141,522		SSV 140A/B LAUNCH	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 716	В3
2129 V-02	IA14B	141,523		SSV 140A/B LAUNCH	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 716	83
2136 V-01	IH3	141,514		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-02	IH3	141,515		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-03	IH3	141,516		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-04	IH3	141,517		B17 C7 M4 F5 W103 E22 V7 R5	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2137 V-01, R-01	IAGO	134,103		CONFIGURATION 3, MODEL 32-0)	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 108	Н1
2138 V-01	IH4	144,608		O.010-SCALE VERSION OF THE VEHICLE 3 SPACE SHUTTLE CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL - 1059	Q3

DMS DMS~DR~	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2138 V-02	IH4	144,609		O.010-SCALE VERSION OF THE VEHICLE 3 SPACE SHUTTLE CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL 1059	Q3 -
2138 V-03	IH4	144,610		O.010-SCALE VERSION OF THE VEHICLE 3 SPACE SHUTTLE CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL 1059	Q3 -
2138 V-04	IH4	144,611		O.010-SCALE VERSION OF THE VEHICLE 3 SPACE SHUTTLE CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL 1059	- Q3
2143	IA61A	144,587		INTEGRATED VEHICLE- CONFIGURATION 3 LINES	AEDC - SUPERSONIC WIND TUNNEL (A) VA422	TQ -
2144	1868	134,427		LAUNCH CONFIGURATION	NRLAD - 7-FOOT TRISONIC WIND TUNNEL 281	F4 -
2146	154	134,092		30-0TS	LARC - 26-INCH TRANSONIC BLOWDOWN TUNNEL 547	HF -
2148 V-01	IH20	134,440		22-OTS	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 185	EN -
2148 V-02	IH20	134,441		22-0TS	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 185	EN -
2153	IH1	151,377		ORBITER ALONE	LARC - Unitary plan wind tunnel 1071	Q7 -
2156 V-01	IA17A	141,797		ORBITER WITH ET SEPARATING ISOLATED ORBITER	AEDC - Hypersonic wind tunnel (B) VA422	TR -

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2156 V-02	IA17A	141,798		ORBITER WITH ET SEPARATING ISOLATED ORBITER	AEDC - HYPERSONIC WIND TUNNEL (B) VA422	TR
2156 V-03	IA17A	141,799		ORBITER WITH ET SEPARATING ISOLATED ORBITER	AEDC - HYPERSONIC WIND TUNNEL (B) VA422	TR -
2157	IH19	141,822		ORBITER EXTERNAL TANK	LARC - HYPERSONIC NITROGEN TUNNEL 28	QE -
2158	IS6A	147,640		O13, T9, S7	MSFC - 14-INCH TRISONIC WIND TUNNEL 582	1B -
2160	IA18	134,413		52-OT ET ALONE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 191	ES -
2164 V-01	0H12 IH21	141,828		MODEL 37-OT (CONFIG. 3 ORB AND ET) CONFIGURATION 3 ORBITER	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 173-100	UG -
2164 V-02	0H12 IH21	141,829		MODEL 37-OT (CONFIG. 3 ORB AND ET) CONFIGURATION 3 ORBITER	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 173-100	UG -
2164 V-03	0H12 IH21	141,830		MODEL 37-OT (CONFIG. 3 ORB AND ET) CONFIGURATION 3 ORBITER	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 173-100	UG -
2166	IH16	141,534		ORB.+ET+SRB ET	LARC - UNITARY PLAN WIND TUNNEL 1041	- PQ
2168	LA32		71945	THERMAL PROTECTION SYSTEM	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 97	QO

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2169 V-01	IA81A	141,836		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-02	APBAI	141,837	•	LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-03	IA81A	141,838		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-04	I A 8 1 A	141,839		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-05	IA81A	141,840		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-06	IA81A	141,841		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 019	ET
2169 V-07	IAB1A	141,842		LAUNCH VEHICLE 5	ARC - 11-FDOT TRANSONIC WIND TUNNEL (UNI TARY) 019	ET
2170 V-01	1A19	141,543		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 014	EU

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DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2170 V-02	IA19	141,544	٠	LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 014	EU
2170 V-03	IA19	141,545		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 014	EU
2173	IA8	134,107		6-OTS	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 711	ВК
2174 V-01	1A33	141,811		VEHICLE 5 CONFIGURATION	MSFC - 14-INCH TRISONIC WIND TUNNEL - 594	10
2174 V-02	EEAI	141,812		VEHICLE 5 CONFIGURATION	MSFC - 14-INCH TRISONIC WIND TUNNEL - 594	1C
2174 V-03	EEAI	141,813		VEHICLE 5 CONFIGURATION	MSFC - 14-INCH TRISONIC WIND TUNNEL - 594	1C
2175 V-01	IA70	134,431		MODEL 49-0 + 67TS INTEGRATED VEHIC LE	NRLAD - 7-FOOT TRISONIC WIND TUNNEL - 282	F7
2175 V-02	1A70	134,432		MODEL 49-0 + 67TS INTEGRATED VEHIC LE	NRLAD - 7-FOOT TRISONIC WIND TUNNEL - 282	F7
2175 V-03	1A70	134,433	• · · · · · · · · · · · · · · · · · · ·	MODEL 49-0 + 67TS INTEGRATED VEHIC	NRLAD - 7-FOOT TRISONIC WIND TUNNEL - 282	F7

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2180 V-01	1H28	147,615		SSV ORBITER (MODEL(50-0) SSV EXT. TANK (MODEL 41-T)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 195	· EV
2180 V-02	IH28	147,616		SSV ORBITER (MODEL(50-0) SSV EXT. TANK (MODEL 41-T)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 195	EV
2189	IA110	141,506		ORBITER 140A/B	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 052	E 1
2192 V-01	IA87	141,541		O/ET; O/ET,SRB; SRB	AEDC - SUPERSONIC WIND TUNNEL (A) - GOA	TU
2192 V-02	IA87	141,542		O/ET; O/ET,SRB; SRB	AEDC - SUPERSONIC WIND TUNNEL (A) ~ 60A	TU
2194 V-01	IA81B	141,817		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 019	ET
2194 V-02	I A 8 1 B	141,818		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 019	ЕΤ
2194 V-03	IA81B	141,819		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 019	ET
2194 V-04	IA81B	141,820		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 019	ЕТ

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2194 V-05	IA81B	141,821		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 019	ET
2199	LA43A/B LA43B		3315	ORBITER; ET: SRB	LARC - UNITARY PLAN WIND TUNNEL - 1074 1093	Н5
2200	LA44		3336	ORBITER-140A/B; SRB; ET;	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 677	· Н6
2204	1A43	141,525		OTS, 140A/B	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL - 693	нс
2206	IA44	141,528		O.O1O-SCALE OUTER MOLD LINE MODEL OF THE 140A/B CONFIGURATION	LARC - UNITARY PLAN WIND TUNNEL - 1088/1119	Н8
2210	IH27	151,372		15-0 VIII (FLAT-PLATE CARRIER)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 200	E3
2212 V-01	IABO	147,632		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 023	E4
2212 V-02	OBAI	147,633		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 023	E4
2212 V-03	IABO	147,634	!	LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 023	E4

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2212 V-04	IASO	147,635		LAUNCH VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 023	E4
2219 V-01	IA82C	144,597		LAUNCH VEHICLE 5	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 044	E 5
2219 V-02	IA82C	144,598		LAUNCH VEHICLE 5	ARC - 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - O44	£5
2224	LA56	147,650		72-OTS (ORB., ET, SRM)	LARC - NASA LANGLEY RESEARCH CENTER - 699 8-FOOT TRANSONIC PRESSURE TUNNEL -	HW
2226	IA61B	141,507		SPACE SHUTTLE VEHICLE CONFIGURATION 3 MODEL 32-OTS SPACE SHUTTLE ORBITER MODEL 52-O	AEDC - SUPERSONIC WIND TUNNEL (A) - VA422 21AA	V4
2227	IA71	141,806		ORB./W/ET AND SRB 740TS; ORB. W/ET AND SRB'S 770, 74TS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 610	1K
2230	IA17B	141,509		ORBITER-TANK MATED, MODEL 52-07	AEDC - HYPERSONIC WIND TUNNEL (B) - VA422	v3
2231 V-01	1A82B	144,601		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 044	E6

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2231 V-02	IA82B	144,602		LAUNCH VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 044	E6
2235	SA3OF	141,810		SRB W/O HEAT SHIELD, W/HEAT SHIELD ON SKIRT, W/HEAT SHIELD ON NOZZLE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 611	1 J
2240	IH41A	151,054		60-OTS THERMOCOUPLE MODEL	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	V7
2242 V-01	IA111	141,831		52-OTS	AEDC - SUPERSONIC WIND TUNNEL (A) - A3A	V8
2242 V-02	IA111	144,588		52-OTS	AEDC - SUPERSONIC WIND TUNNEL (A) - A3A	V8
2248	IH48	144,599		60 OTS SPACE SHUTTLE VEHICLE 5	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 211	NB
2249	IH33	151,775		37-OT SPACE SHUTTLE ORBITER/EXTERN AL TANK01 SCALE	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL - 185-131 96-INCH HYPERSONIC SHOCK TUNNEL -	UJ
2253	IA125	144,833		77-0, 77-OTS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 622	1N
2255			62,444	SERIES-BURN, PARALLEL-BURN; 2 CANO PY CONFIGURATIONS;	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	NF

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2258 V-01	IA72	151,045		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2258 V-02	IA72	151,046		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 072	NE ·
2258 V-03	IA72	151,047		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2258 V-04	IA72	151,048		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE .
2258 V-05	IA72	151,049		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2258 V-06 ,	1A72	151,050	•	88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2258 V-07	IA72	151,051		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2258 V-08	IA72	151,052		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE

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2258 V-09	IĄ72	151,053		88-OTS MODIFIED W/OMS PODS AND COL D AIR MPS AND SRB PLUME SIMULATION	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 072	NE
2 272 V-01	IA114	151,077		ssv 3	AEDC - HYPERSONIC WIND TUNNEL (B) - C4A	vc
2272 V-02	IA114	151,078		SSV 3	AEDC - HYPERSONIC WIND TUNNEL (B) - C4A	VC
2274	FA14	144,593	•	74-OTS, VEH. 5 (ASCENT CONFIG.)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 600	1L
2282	IH34	151,407		PLUME SIMULATION MODEL 19-OTS	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 038	GF
2284 V-01	IS2A/B	151,035		INTEGRATED SPACE SHUTTLE VEHICLE 84-01S	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 113 11-FOOT TRANSONIC WIND TUNNEL (UNITARY) -	NK
2284 V-02	IS2A/B	151,036	ł .	INTEGRATED SPACE SHUTTLE VEHICLE 84-OTS	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 113 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) -	NK
2293	1A40	151,381		MODEL 75-OTS (72-0 WING, 140C MOD. FUSELAGE, ET, SRB)	AEDC - SUPERSONIC WIND TUNNEL (A) - K1A	VT

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2295 V-01	IH41B	151,069		ET ALONE T34 ORBITER ALONE B62C12E52F10M16R18V 8W116	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	VF
2295 V-02	IH4 1B	151,070		ET ALONE T34 ORBITER ALONE B62C12E52F10M16R18V 8W116	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	VF
2295 V-03	IH41B	151,071		ET ALONE T34 ORBITER ALONE B62C12E52F10M16R18V 8W116	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	VF
2295 V-04	IH4 1B	151,072		ET ALONE T34 ORBITER ALONE B62C12E52F10M16R18V 8W116	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	VF
2295 V-05	IH41B	151,073		ET ALONE T34 ORBITER ALONE B62C12E52F10M16R18V 8W116	AEDC - SUPERSONIC WIND TUNNEL (A) - A4A	VF
2299	LA80		3497	ORBITER/747 FERRY VEHICLE	LARC - HIGH SPEED 7 BY 10-FOOT TUNNEL - 999	JN
2306 V-01	IA135A/B/C	167,354		O - B26C9E44F9M16R5V8W116 T - AT28AT29AT3OAT31AT32AT128FL10F L11FR10PT22PT23PT24PT25PT26PT27T37	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 144-1	NQ
2306 V-02	IA135A/B/C	167,355		O - B26C9E44F9M16R5V8W116 T - AT28AT29AT3OAT31AT32AT128FL10F L11FR10PT22PT23PT24PT25PT26PT27T37	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 144-1	NQ
2306 V-03	IA135A/B/C	167,356	: : :	O - B26C9E44F9M16R5V8W116 T - AT28AT29AT3OAT31AT32AT128FL1OF L11FR1OPT22PT23PT24PT25PT26PT27T37	ARC 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL 144-1	NQ

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2308	IH5	147,636		19-0TS	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 181	-	UL
2312 V-01	IH47	151,075		VEHICLE 5, TO INCLUDE SRB ALONE AN D OTS (SPIKE NOSE ET)	AEDC - SUPERSONIC WIND TUNNEL (A) J3A	-	VI
2312 V-02	IH47	151,076		VEHICLE 5, TO INCLUDE SRB ALONE AN D OTS (SPIKE NOSE ET)	AEDC - SUPERSONIC WIND TUNNEL (A) J3A	-	VI
2315	IA141	147,623		O.010-SCALE VL70-000140C INTEGRATE D SPACE SHUTTLE LAUNCH VEHICLE	NRLAD - 7-FOOT TRISONIC WIND TUNNEL 297	-	FK .
2316	IA137	147,622		FULL 331 INCH DIAMETER FOREBODY AN 80% (264.8 INCH) OF FULL DIAMET ER FOREBODY	ARC - 14-FOOT TRANSONIC WIND TUNNEL 143-1	-	NY
2319	IH43	151,771		.O1-SCALE SPACE SHUTTLE ORB/ET 59- OT	CALSPAN - 48-INCH HYPERSONIC SHOCK TUNNEL 189 96-INCH HYPERSONIC SHOCK TUNNEL	-	UM
2323	14944	151,039		O.O1O-SCALE 72-OTS MODEL	LARC - UNITARY PLAN WIND TUNNEL 1152	-	JK
2324	IA94B	151,040		O.O1O-SCALE 72-OTS MODEL	LARC - UNITARY PLAN WIND TUNNEL 1177	-	JW
2326 V-01	EPAI	151,037		O.O1O-SCALE 72-OTS MODEL	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 749	-	JJ
23 2 6 V-02	1A93	151,038		O.O1O-SCALE 72-OTS MODEL	LARC 8-FOOT TRANSONIC PRESSURE TUNNEL 749	-	JJ

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2327 V-01	1A22	151,079		CONFIG. 102 ORBITER AND ET, DESIGN ATED MODEL 70-0T	AEDC - HYPERSONIC WIND TUNNEL (B) D9A	VK -
2327 V-02	IA22	151,080		CONFIG. 102 ORBITER AND ET, DESIGN ATED MODEL 70-OT	AEDC - HYPERSONIC WIND TUNNEL (B) D9A	VK
2327 V-03	I A 2 2	151,081		CONFIG. 102 ORBITER AND ET, DESIGN ATED MODEL 70-OT	AEDC - HYPERSONIC WIND TUNNEL (B) D9A	- VK
2328	LA34 TND-8233			REUSABLE SURFACE INSULATION TILE G APS	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL 105	QQ
2335	IA14OA/B	151,783		VEHICLE 5 MODEL 74-OTS	MSFC - 14-INCH TRISONIC WIND TUNNEL 641 646	1Q -
2346 V-01	IA142	151,385		75-OTS	AEDC - SUPERSONIC WIND TUNNEL (A) K1A	- vo
2346 V-02	IA142	151,386		75-OTS	AEDC - SUPERSONIC WIND TUNNEL (A) K1A	vo -
2346 V-03	IA142	151,387		75-OTS	AEDC - SUPERSONIC WIND TUNNEL (A) K1A	vo -
2354 V-01	IA143	151,401	1	MODEL 75-OTS (WING)	AEDC - SUPERSONIC WIND TUNNEL (A) P8A	- vx
2354 V-02	IA143	151,402	2	MODEL 75-OTS (WING)	AEDC - SUPERSONIC WIND TUNNEL (A) P8A	- vx

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2354 V-03	IA143	151,403	3	MODEL 75-OTS (WING)	AEDC - SUPERSONIC WIND TUNNEL (A) - P8A	vx
2354 V-04	IA143	151,404	4	MODEL 75-OTS (WING)	AEDC - SUPERSONIC WIND TUNNEL (A) - P8A .	VX
2357	1H68	167,655		INTEGRATED VEHICLE ORBITER PLUS TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 222	2 D
2372	IH72	160,843		OTS TANK ALONE	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-R2A	VZ
2377 V-01	IA144	167,342		O - 140A/B/C/R SRB - MODIFIED VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 228-1	2N
2377 V-02	IA144	167,343		O - 140A/B/C/R SRB - MODIFIED VEHICLE 5	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 228-1	2N _.
2378	IA191	160,820		MODEL 112-T	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 412-1	AA
2384 V-01	IA148	151,412		OV102 + ET (MODEL 70-OT)	AEDC - HYPERSONIC WIND TUNNEL (B)	4D
2384 V-02	IA148	151,413		OV102 + ET (MODEL 70-OT)	AEDC - HYPERSONIC WIND TUNNEL (B) - TOA	4D

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2391	IA244	167,346		OTS - SINGLE STING IN ORBITER OTS - ET AND SRB ON SEPERATE STING	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 779	KE -
2393 V-01	IH51A	167,679		OT FLAT PLATE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 228-1	20
2393 V-02	IH51A	167,680		OT FLAT PLATE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 228-1	20
2393 V-03	IH51A	167,681		OT FLAT PLATE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 228-1	20
2393 V-04	IH51A	167,682		OT FLAT PLATE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 228-1	20
2397	LA113	167,347		O -140A/B/C/R T -MODIFIED VEHICLE 5	LARC - 8-FOOT TRANSONIC PRESSURE TUNNEL 780	KH -
2398 V-01	IA 105A	160,850		B62C9E64W131M16N28N112R5V8FD3F9 T39	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) 470	4B -
2398 V-02	IA 105A	160,851		B62C9E64W131M16N28N112R5V8FD3F9 T39	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) 470	4B -
2398 V-03	IA105A	160,852		B62C9E64W131M16N28N112R5V8FD3F9 T39	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) 470	4B -

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2401	IS1A/B/C OS3	151,395		11-OTS (ORB, ET, 2 SRB'S)	ARC - 11-FOOT, 9-FOOT, 8-FOOT, UNITARY W IND TUNNEL - 705-1	2\$
2403 V-01	IA156A	160,515		B75C16E64F16FR22HG1M52N108N109N110 N111R20U1V27V29VT10VT11VT14VT17W13 1T39S27	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 470	4C
2403 V-02	IA156A	160,516		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27V29VT10VT11VT14VT17W13 1T39S27	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 470	4C
2403 V-03	IA156A	160,517		B75C16E64F16FR22HG1M52N108N109N110 N111R20U1V27V29VT10VT11VT14VT17W13 1T39S27	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 470	4C
2404 V-01	IA119	160,510		88-OTSO2 SCALE OF THE INTEGRATED SPACE SHUTTLE VEHICLE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 275-1	2R
2404 V-02	IA119	160,511		88-OTS02 SCALE OF THE INTEGRATED SPACE SHUTTLE VEHICLE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 275-1	2R
2404 V-03	IA119	160,512		88-OTSO2 SCALE OF THE INTEGRATED SPACE SHUTTLE VEHICLE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 275-1	2R
2404 V-04	IA119	160,513		88-OTS02 SCALE OF THE INTEGRATED SPACE SHUTTLE VEHICLE	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) 275-1	2R

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2406	IA181	167,348		B62,C12,E62,F10,M16,N28,R5,V8,W127 AT16,AT17,AT18,FL5,FL6,FL9,FR6,PT1 3,PT14,PT20,T20	MSFC - 14-INCH TRISONIC WIND TUNNEL - 649	1U
2407	IH73	167,374		B22C7F5M4V7W111 T8	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 233-1	2V
2408 V-01	IA 156B	160,498		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27V29VT10VT11VT14VT17W13 1T39S27	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 272	2Т
2408 V-02	IA156B	160,499		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27V29VT10VT11VT14VT17W13 1T39S27	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 272	2Т
2408 V-03	IA 156B	160,500		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27V29VT10VT11VT14VT17W13 1T39S27	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 272	2Т
2412 V-01	1H90	167,386		60-OTS (B62C12E52F10M16R18V8W116T 38S26)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 234-1	2W
2412 V-02	1H90	167,387		60-0TS (B62C12E52F10M16R18V8W116T 38S26)	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 234-1	2W
2413 V-01	IA 105B	160,858	;	B62C9E64W131M16N28R5V8FD3F9 T39S27	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 242-1	20
2413 V-02	IA 105B	160,859	. !	B62C9E64W131M16N28R5V8FD3F9 T39S27	ARC 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 242-1	2U

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2416	18603	160,824		LBM SSLV	MSFC - TRISONIC WIND TUNNEL - 668	6C
2418	IH100	151,414		WEDGE SHAPED MODEL TO HOLD DFI GAS TEMP. PROBE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 227	3Z
2422	FH15	151,767		30/10/40-DEGREE CONE OGIVE	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-2O	4K
2428 V-01	IH11	160,523		84-OTS035 SCALE MODEL OF THE IN TEGRATED SPACE SHUTTLE VEHICLE	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 045	GI
2428 V-02	IH11	160,524		84-OTS035 SCALE MODEL OF THE IN TEGRATED SPACE SHUTTLE VEHICLE	LERC - 10 BY 10-F00T SUPERSONIC WIND TUNN EL - 045	GI
2428 V-03	IH11	160,525		84-OTS035 SCALE MODEL OF THE IN TEGRATED SPACE SHUTTLE VEHICLE	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 045	GI
2428 V-04	IH11	160,526		84-OTS035 SCALE MODEL OF THE IN TEGRATED SPACE SHUTTLE VEHICLE	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 045	GI
2429	IH51B	167,353		OT FLAT PLATE 580TS	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 239	3C
2431 V-01	IH85	151,793		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2431 V-02	IH85	151,794		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2431 V-03	IH85	151,795		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2431 V-04	IH85	151,796		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2431 V-05	IH85	151,797		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4 L
2431 V-06	IH85	151,798		OTS-T38526B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2431 V-07	IH85	151,799		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2431 V-08	IH85	151,800		OTS-T38S26B62C12M16W116E52V8R18F10 OT-T38B62C12M16W116E52V8R18F10	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-W5	4L
2435	IH39	151,415		INTEGRATED VEHICLE CONFIGURATION 5	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 041	GК
2437	FA25	151,766	:	MODEL 74-OTS MODEL 74-OTS WITH ORB. MOLD LINE C HANGES ON WING AND NOSE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 652	1X,

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2438 V-01	IA138	160,855		PROPOSED VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 246-1	3D
2438 V-02	IA138	160,856		PROPOSED VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 246-1	3D
2438 V-03	IA138	160,857		PROPOSED VEHICLE 5	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 246-1	3D
2439	IA182	167,673		MODEL 47-DTS	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 517	4P
2440	IH83	151,765		SPACE SHUTTLE PLUME SIMULATION (MO DEL 19-OTS)	LERC - 10 BY 10-FOOT SUPERSONIC WIND TUNN EL - 044	GZ
2444 V-01	E81AI	160,488		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27VT10VT11VT12VT13VT14 VT15VT16VT17W131T39S27	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 519	40
2444 V-02	IA183	160,489		B75C16E64F16FR22HG1M52N108N109N110 N111R2OU1V27VT10VT11VT12VT13VT14 VT15VT16VT17W131T39S27	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 519	4Q
2448 V-01	IH51C	160,519	:		ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 241	3 F

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2448 V-02	IH51C	160,520			ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 241	3F
2449	IA132	160,497		EXTENAL OXYGEN HYDROGEN TANK FOREB ODY MODEL	AEDC - TRANSONIC PROPULSION WIND TUNNEL (PWT-16T) - 505	4R
2 452	IH99	167,383		SSV SRB NOSE	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 230	2P
2453	IH75	151,776		19-OTS-B64,C16,E63,F14,M18,N92,N94,V23,W129,S22,N106,T33	CALSPAN - LUDWIEG TUBE - 195-100	UQ
2456 V-01	IA 184	160,486		O.O3-SCALE SHUTTLE INTEGRATED VEHI CLE 47-OTS	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 347-1	зк
2456 V-02	IA184	160,487		O.O3-SCALE SHUTTLE INTEGRATED VEHI CLE 47-OTS	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) 347-1	зк
2457	IA180	160,813		EXTERNAL OXYGEN HYDROGEN TANK FORE BODY MODEL	LARC - UNITARY PLAN WIND TUNNEL - 1267	ΚV
2461	IH51D	167,677		MODEL 58-0	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 244	3N

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2462 V-01	IA131B/C	167,370		ET FOREBODY (T41)- LOUVERS OPEN, C T FAIRING AND GO2 LINE INSTALLED ET FOREBODY (T41)- LOUVERS OPEN, C T,FAIRING, AND GO2 LINE REMOVED	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 283-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	3E
2462 V-02	IA131B/C	167,371		ET FOREBODY (T41) - LOUVERS OPEN, C T FAIRING AND GO2 LINE INSTALLED ET FOREBODY (T41) - LOUVERS OPEN, C T,FAIRING, AND GO2 LINE REMOVED	ARC - 9-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) - 283-1 8-FOOT BY 7-FOOT SUPERSONIC WIND T UNNEL (UNITARY) -	3 E
2464 V-06	IH102	160,833		B60C10 (83-0)	AEDC - SUPERSONIC WIND TUNNEL (A) - V41A-67	4W
2467	IH103	160,834		60-0T 56-0/60T	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 245	ЗР
2471	LA132	160,514		LAUNCH VEHICLE - 890TS	LARC - 16-FOOT TRANSONIC TUNNEL - 341	KW
2474	FA28	160,826		ORBITER ALONE LAUNCH CONFIGURATION (NO PROTUBERA NCES ON ET)	MSFC - 14-INCH TRISONIC WIND TUNNEL - 656	12
2475	LA140	160,509		LAUNCH VEHICLE (89-0TS)	LARC - 16-FOOT TRANSONIC TUNNEL - 342	KY
2480	IH104	167.657	· : : : : : : : : : : : : : : : : : : :	ORBITER+TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 250	3 W

INTEGRATED VEHICLE DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X Number	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2481	I A 6 0 2	167,377		OTS (MODEL 74) OTS + LBM	MSFC - 14-INCH TRISONIC WIND TUNNEL - 665	6B
2511 V-01	1A300	167,669		75-0TS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 561-1	AZ
2511 V-02	00EÅ1	167,670		75-0TS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 561-1	AZ
2511 V-03	1A300	167,671		75-OTS	ARC - 11-FOOT TRANSONIC WIND TUNNEL (UNI TARY) - 561-1	AZ
2514	FA301	167,687		LAUNCH VEHICLE WITH INTERSTAGE FAI RINGS	MSFC - 14-INCH TRISONIC WIND TUNNEL - 692	A6

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CARRIER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2201	CA3	160,854		BOEING 747 CARRIER (MODEL TE 1065)	UW - LOW SPEED WIND TUNNEL 1136	GL -
2211 V-01	CA5	141,800		O.O3-SCALE AX 1319 I-1 (CARRIER) M ODEL	TBCA - Transonic Wind Tunnel 1431	GM -
2211 V-02	CA5	141,803		O.O3-SCALE AX 1319 I-1 (CARRIER) M ODEL	TBCA - Transonic wind tunnel 1431	GM -
2211 V-03	CA5	141,804		O.O3-SCALE AX-1319 I-1(CARRIER) MO DEL	TBCA - Transonic wind tunnel 1431	GM -
2217 V-01	CA2O	141,844		O.O3-SCALE 45-O MODIFIED SSV ORBIT ER 140A/B	TBCA - Transonic wind tunnel 1431	GN -
2217 V-02	CA2O	141,845		O.O3-SCALE 45-O MODIFIED SSV ORBIT ER 140A/B	TBCA - Transonic wind tunnel 1431	GN -
2217 V-03	CA2O	141,846		O.O3-SCALE 45-O MODIFIED SSV ORBIT ER 140A/B	TBCA - Transonic wind tunnel 1431	GN -
2236	CA11	141,835		BOEING 747 MATED WITH AN EXTERNAL TANK.	UW - LOW SPEED WIND TUNNEL 1146	GO -
2243	CA23A	144,583		MODEL 48-0/AX1318I-1 0.0125 SCALE	ARC - 14-FOOT TRANSONIC WIND TUNNEL 080	E9 -
2262 V-01	CAG	147,630		CARRIER W/ ORB. ALONE, CARRIER ALO NE, MATED 747/ORBITER	TBCA - TRANSONIC WIND TUNNEL 1472	GP

CARRIER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR Number	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2262 V-02	CAG	147,631		CARRIER W/ ORB. ALONE, CARRIER ALO NE, MATED 747/ORBITER	TBCA - TRANSONIC WIND TUNNEL 1472	GP -
2268 V-01	CA9 CA9P	151,396		BOEING AX1319P-1 CARRIER	TBCA - Transonic wind tunnel 1477	GQ -
2268 V-02	CA9 CA9P	151,397		BOEING AX1319P-1 CARRIER	TBCA - TRANSONIC WIND TUNNEL 1477	GQ -
2268 V-03	CA9 CA9P	151,398		BOEING AX1319P-1 CARRIER	TBCA - TRANSONIC WIND TUNNEL 1477	GQ -
2268 V-04	CA9 CA9P	151,399		BOEING AX1319P-1 CARRIER	TBCA - TRANSONIC WIND TUNNEL 1477	GQ -
2268 V-05	CA9 CA9P	151,400		BOEING AX1319P-1 CARRIER	TBCA - TRANSONIC WIND TUNNEL 1477	GQ -
2273 V-01	CA26	144,612		AX1318I-1, 747/1, 747/4	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2273 V-02	CA26	144,613		AX1318I-1, 747/1, 747/4	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2273 V-03	CA26	144,614		AX1318I-1, 747/1, 747/4	LTV - HIGH SPEED WIND TUNNEL 559	FE -
2273 V-04	CA26	144,615		AX1318I-1, 747/1, 747/4	LTV - HIGH SPEED WIND TUNNEL 559	FE -

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CARRIER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2338	CS3	147,639		AX1322D-3,ORBITER MODEL 8-0	UW LOW SPEED WIND TUNNEL 1170	GU -
2341	CS4/5	147,638		747CAM/ORBITER	TBCA - TRANSONIC WIND TUNNEL 1490/1493	GV -
2347 V-01	CA15A	160,482		.04 SCALE 747-100	UW - LOW SPEED WIND TUNNEL 1173	GS -
2348 V-01	CA 15B	160,483		747-100 ALONE	UW - LOW SPEED WIND TUNNEL 1178 .	GT -
2349	CA 17	151,379		CARRIER B29BW45N5857M2526T14Q12AT 115.1106.1V9.1.3FTS1	UW - LOW SPEED WIND TUNNEL 1184	GW -

CARRIER DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2273 V-05	CA26	144,616		AX1318I-1, 747/1, 747/4	LTV - HIGH SPEED WIND TUNNEL - 559	FE
2275 V-01	CA23B	144,603		O.0125-SCALE SSV ORBITER	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 120	NH
2275 V-02	CA23B	144,604		O.0125-SCALE SSV ORBITER	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 120	NH .
2290 V-01	CA8	147,641		747/ORBITER-FERRY CONFIGURATION, 7 47/ORBITER-ALT CONFIGURATIONS	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL 129	JF
2290 V-02	CA8	147,642		747/ORBITER-FERRY CONFIGURATION, 7 47/ORBITER-ALT CONFIGURATIONS	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL 129	JF
2290 V-03	CA8	147,643		747/ORBITER-FERRY CONFIGURATION, 7 47/ORBITER-ALT CONFIGURATIONS	LARC - V/STOL TRANSITION RESEARCH WIND TU NNEL 129	JF
2307 V-01	CA14A	160,840		BOEING 747 CAM W/TYPE II MODIFICAT ION (MODEL TR-1007)	TBCA - TRANSONIC WIND TUNNEL - 1496 1497	GR
2307 V-02	CA14A	160,841		BOEING 747 CAM W/TYPE II MODIFICAT ION (MODEL TR-1007)	TBCA - TRANSONIC WIND TUNNEL - 1496 1497	GR
2332	CA13	151,373		ORBITER- TAILCONE OFF, TAILCONE ON -TC19,	ARC - 14-FOOT TRANSONIC WIND TUNNEL - 121	NZ

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EXTERNAL TANK DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2085	0H10 IH2	167,344			ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 171	В9
2133	1A58	134,110		EXTERNAL TANK	LARC - CONTINUOUS-FLOW HYPERSONIC TUNNEL - 107	QK
2136 V-01	ІНЗ	141,514		B17 C7 M4 F5 W103 E22 V7 R5	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-02	1H3	141,515		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-03	IH3	141,516		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	EI
2136 V-04	1H3	141,517		B17 C7 M4 F5 W103 E22 V7 R5 T10	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL - 178	. EI
2145	TA1F	134,420		EXTERNAL TANK WITH PROTUBERANCES EXTERNAL TANK WITHOUT PROTUBERANCE S	MSFC - 14-INCH TRISONIC WIND TUNNEL - 583	99
2153	IH1	151,377		SRB ALONE	LARC - UNITARY PLAN WIND TUNNEL - 1071	Q7
2165 V-01	TA2F	141,823		EXTERNAL TANK WITH AND WITHOUT PRO TUBERANCES, 0.003 SCALE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 596	1A
2165 V-02	TA2F	141,824		EXTERNAL TANK WITH AND WITHOUT PRO TUBERANCES, 0.003 SCALE	MSFC - 14-INCH TRISONIC WIND TUNNEL - 596	1A

EXTERNAL TANK DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2165 V-03	TA2F	141,825	•	EXTERNAL TANK WITH AND WITHOUT PRO TUBERANCES, O. 003 SCALE	MSFC - 14-INCH TRISONIC WIND TUNNEL 596	1A
2165 V-04	TA2F	141,826		EXTERNAL TANK WITH AND WITHOUT PRO TUBERANCES,O.OO3 SCALE	MSFC - 14-INCH TRISONIC WIND TUNNEL 596	1A -
2165 V-05	TA2F	141,827		EXTERNAL TANK WITH AND WITHOUT PRO TUBERANCES, 0.003 SCALE	MSFC - 14-INCH TRISONIC WIND TUNNEL 596	- 1A
2181	TA9F	134,425		EXTERNAL TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 196	EY -
2197	FH10	134,418		ET MODEL MCRO200	AEDC - Hypervelocity wind tunnel (f) VA291	тх -
2208 V-01	TAGF	144,590		MODEL NO. 470	MSFC - 14-INCH TRISONIC WIND TUNNEL 609	1G -
2208 V-02	TA3F	144,591		MODEL NO. 470	MSFC - 14-INCH TRISONIC WIND TUNNEL 609	1G -
2218	TH1F	151,367		EXTERNAL TANK	AEDC - Hypervelocity wind tunnel (f) 25A	TY
2276	FH13	151,055	! !	40-DEG NOSE-CLEAN(NO PROTUBERANCES) DOUBLE CONE(10-DEG-40-DEG)(NO PROTUBERANCES)	AEDC - SUPERSONIC WIND TUNNEL (A) E1A	VD -
2313 V-01	FH14	151,041		.0275 SCALE SPACE SHUTTLE EXTERNAL TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 215	NT -

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EXTERNAL TANK DATA

DMS DMS-DR-	NASA SERIES NUMBER	NASA CR NUMBER	NASA TM-X NUMBER	CONFIGURATION	TEST NUMBER	DATASET 2-CHARACTER DESCRIPTOR
2313 V-02	FH14	151,042		.0275 SCALE SPACE SHUTTLE EXTERNAL TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 215	NT -
2313 V-03	FH14	151,043		.0275 SCALE SPACE SHUTTLE EXTERNAL TANK	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 215	NT -
2423	FH16	151,768		30,10,40 DEGREES CONICAL SPIKE FOR ET	ARC - 3.5-FOOT HYPERSONIC WIND TUNNEL 237	- AE

Table 5-1
Wind Tunnel Tests/DMS Data Processing Summary

Tests processed Page 103
Tests in process Page 365

						WIND	TUNNEL TEST	/ DMS L	DATA	PROCES	SING						
	*			*		*		*		*MODEL		*		*	COGNIZANT	*	BASIC
TEST	*			*	CONFIGURATIONS	*	TEST	* TYPE	OF	*	SCALE	* TESTI	NG	*	TEST DMS		LICATI
ID	*	REPORT	TITLE	* 	TESTED	*	PURPOSE	* TES	5T 	*MACH	RANGE	* AGENC	Y 	* 	PERSONNEL	*0R	COMMEN
ARC		A EDODVALA	MIC STADE	+810	ATP ORBITER	+450	ODYNAMIC STAB	T+EODCE		*0.019	25 /	*LADC	,	*D	FOURNIER. B	C+DNC	-DD-20
PWT			CONTROL		AIP URBITER		Y AND CONTROL			*1.9		*LARC	_		NCER /LARC	. S≁DMS NOV*	
002			RISTICS				NR ATP ORBITE			*4.63			PLAN		E. VAUGHN	*	٠, '
15			25 SCALE				FIGURATION	*		*		*IND TUN		_	L. GLYNN	*	
			ATP ORBI			*	, I GONATION	*		*		*		*-D		*	
			ACH NUMBE			*		*		*		*		*	.,,	*	
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	*	63		*		*		*		*		*		*		*	
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ARC	- *	RESULTS	OF TRANSO	*NR	PRR ORBITER	*TRA	NSONIC AERODY	N*FORCE		*0.015	/	*LARC	/	*R.	MENNELL, B.	SP*DMS	-DR-20
TPT			S IN THE			*AMI	C CHARACTERIS	T*		*0.3		*LARC	-		CER /NR	*MAR	CH, 1
26			C 8 FOOT			*ICS		*		*1.3					SINGELLTON	*	
11			TUNNEL O			*		*		*		*IC PRES	SURE 1	U+-D	MS	*	
₹-128.7			5 SCALE M			*		*		*		*NNEL		*		*	
			PRR SPACE			*		*		*		*		*		*	
	*	SHUTTLE	ORBITER	*		*		*		*		*		*		*	
	*			*	470 0001750	*		*		*	_ ,	*	,	*	0 ACUDY /1	*	DD 00
ARC					ATP ORBITER		ERSONIC AEROD			*0.004			/		C. ASHBY /L/		
2HT			MARACTERIS				IC CHARACTERI	-		*20.3		*LARC			E. VAUGHN	*APK	IL, 1
)9 \2			NR-ATP OR				S OF NR ATP O	* K*		*		*22-INCH *TUNNEL	HELIL	Μ*≁D	M5	*	
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(- 120, /			NT CONFI			-		Ĩ		-		*		Ţ			
		GURATION		*		-		*		*		*		*			
	*	GONATION	•	*		*		*		*		*		*		*	
·v	- *	IONGITUD	TNAL AFRO	*MS	C O4OA ORBITER	*FLF	VON FEFECTIVE	N*FORCE		*0.05	/	*MSC	/	*P	ROMERE /MSC	*DMS	-DR-20
			CHARACTER	_			AND ALTERNAT			*0.067	•	*LTV	<i>'</i> _		E. VAUGHN	*NOV	
-081			F LOW ASP				FIGURATION GE			*		*15-F00T	BY 20	_		*	• •
۱1	•		O WING CO				TRIES IN PRES			*		*FOOT SUE				*	
			IONS IN G			_	OF GROUND EF	_		*		*WIND TU	NNEL	*		*	
	*	ROUND EF	FECT FOR	* ,		*ECT		*		*		*		*		*	
	*	A MOVING	AND STAT	*		*		*		*		*		*		*	
	*	IONARY G	ROUND SUR	*		*		*		*		*		*		*	
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						WIND 1	FUNNEL TEST	 r / DMS	DATA	PROCES	 SING						104
TEST	•	•		*	CONFIGURATIONS	*	TEST	* TY	PE OF	*MODEL	SCALE	* * TESTI	NG	*	COGNIZANT TEST DMS	* BAS	
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE		EST	*MACH				*	PERSONNEL	+OR COM	
MSFC		AEDODVNA	MIC ST	A 12 T + N	R ATP BASELINE O	1 + A E DOI	NAMIC ST		·E	*0.004	,	*MSFC	,	⋆ D	RAMSEY /MSFC	*DMS-DR	2-2005
14TWT		LITY. CO					AND CONTRO			*0.60	•	*MSFC	_		W. SPARKS	*NOV	
555		ECTIVENE					CTIVENESS			*4.96			TRIS		L. GLYNN	*	
OA1	•	AG CHARA					CHARACTER			*		*IC WIND	_			*	
CR-120.		SOFAS				*TICS		*		*		*		*		*	
		BITER CO				*		*		*		*		*		*	
		ON AT MA				*		*		*		*		*		*	
	*	S FROM C).6 TO	4.9*		*		*		*		*		*		*	
	*	6		*		*		*		*		*		*		*	
	*	t		*		*		*		*		*		*		*	
MSFC	- +	AERODYNA	MIC ST	ATI*N	ISFC/NR PARAMETRI	(*PERF	DRMANCE, S'	TAB*FORC	E	*0.004	/	*MSFC	/	∗P.	E. RAMSEY /MS	SF *DMS -DF	R-2006
14TWT	- *	C STABIL	ITY AN	D C*C	LAUNCH VEHICLE	*ILIT	Y AND CONTI	ROL*		*0.6	-	*MSFC	-	*C		*DEC.,	1972
556	/*	ONTROL E	FFECTI	VEN*		*CHAR	ACTERISTIC:	S *		*4.96		*14-INCH	TRIS	ON*V.	W. SPARKS	*	
IA1A	*	ESS OF A	PARAM	ETR*		*		*		*		*IC WIND	TUNN	EL∗J.	L. GLYNN	*	
CR-120,	088*	IC SHUTT	TLE LAU	NCH*		*		*		*		*		* -D!	AS .	*	
	*	CONFIGUE	NOITAS	*		*		*		*		*		*		*	
	*	•		*		*		*		*		*		*		*	
ARC	- *	RESULTS	OF INV	EST*N	IR SSV ORBITER	*STAT	IC STABILI	TY *FORC	E	*0.015	/	*ARC	/	*B.	CAMERON, C. 1	₩.*DMS-DF	₹-2007
3.5HWT	- *	IGATIONS	S ON A	0.0*		*AND	TRIM CAPAB	ILI*		*7.3	-	*ARC	-	*LA	MONT /NR	*MARCH	, 1973
147	/*	15 SCALE	MODEL	. NO*		*TY,	COMPONENT	INC*		*				_	L. MULKEY	*	
OA4	*	RTH AMER	RICAN R	OCK*		*REME	NTAL EFFEC	TS *		*		*SONIC W	IND T	UN*W.	R. MORGAN	*	
CR-128,		WELL SPA				*		*		*		*NEL		* -DI	45	*	
		E ORBITI				*		*		*		*		*		*	
		NASA/ARC				*		*		*		*		*		*	
		HYPERSON	AIC MIN	D *		*		*		*		*		*		*	
	*	TUNNEL		*		*		*		*		*		* -		*	
	*	•		*		*		*		*		*		, *		*	
LARC					IR ATP ORBITER		DYNAMIC ST.		E	*0.007		*LARC	/		BLACKSTOCK /	_	
CFHT		AND PERI					AND PERFO			*10.3	-	*LARC	-	*RC		*JAN.,	1973
89		HARACTE			•		AT HYPERSO			*					W. SPARKS	*	
MA4		THE A.T.		IT *		*MACH	NO. OF 10	*		*			SONIC		R. ZILER	*	
CR-128,		ER AT M	= 10.3	*		*		*		*		*UNNEL		*-D1	45	*	
	*			*		*				*		*		*		*	
LARC					IR ATP ORBITER		DYNAMIC ST		E	*0.007		*LARC	/		BLACKSTOCK /		
CFHT		AND PERF		-			AND PERFO			*10.3	-	*LARC		*RC		*REVIS	
89	•	HARACTE					AT HYPERSO			*					W. SPARKS	*MAY,	1973
MA4		THE A.T.		* 11		*MACH	NO. OF 10	*		*			,		R. ZILER	*	
CR-128,	/51*	ER AT M	• 10.3	*		*	1 1	* 1		*		*UNNEL		*-D	MS	*	
	*	*		*		*		日 三字字		*		*	: :	*		* .	

				WIND TUNNEL TEST	/ DMS DATA	PROCESSING	3		105
	*	*		*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST			NFIGURATIONS				LE* TESTING	* TEST DMS	
ID	* REPORT TITL	t * 	TESTED	* PURPOSE	* TEST	*MACH RANG	GE* AGENCY	* PERSONNEL	*OR COMMENTS
ARC	- *AERODYNAMIC C					*.015	/ *ARC /	*B. CAMERON, J.	
	- *CTERISTICS OF			ON, LONGITUDINA		*0.6 -			/R*JUNE, 1973
650	/*ROCKWELL INTE			*AND LATERAL-DIR		*2.0	*6-FOOT BY 6-F	U*I *B. J. FRICKEN	*
OA3	TIONAL ORBITE* 761*3 AT MACH NUM			*TIONAL STABILIT *EFFECTS	Y *	*	*UI SUPERSUNIC	_ · · · - · · · · · · · · · · · · · · ·	*
CR-128,	*FROM 0.6 TO 2			*EFFEU15	*	*	** MIND IONNEC	*-DM3	*
•	* * * * * * * * * * * * * * * * * * *	.0 +		*	*	*	*	*	*
MSFC	- *DETERMINATION	OF *NR A	TP ORBITER/TA	*AERODYNAMIC CHA	RA*FORCE	*0.004	/ *MSFC /	*P. RAMSEY / MSF	C *DMS-DR-2010
14TWT	- *THE AERODYNAM					*0.60 -		*- R. BUCHHOLZ /	
545	/*NTERFERENCE B			*SEPARATION	*	*4.96		N*SC - E. ALLEN /	
IA1B	*EN THE SPACE	SHUT*	•	*	*	*	*IC WIND TUNNE	L*- J. DEHART/NSI	*
CR-120,	D6O*TLE ORBITER,		1	*	*	*	*	*V. W. SPARKS	*
	*RNAL TANK, AN		,	*	*	*	*	*J. R. ZILER	*
	*LID ROCKET BO		•	*	*	*	*	*-DMS	*
	*R ON A 0.004		1	*	*	*	*	*	*
	E ASCENT CONF	IGUR	•	*	*	*	*	*	*
	*ATION	*	•	*	*	*	*	-	*
MSFC	- *SPACE SHUTTLE	(AT*ND A	TP OPRITED/FY	* *RASELINE SEDADA	TI*FODCE	*0.004	/ *MSFC /	*J. RAMPY /NSI -	K*DMS-DR-2011
14TWT	- *P CONFIGURATI				*	*0.9 -		*. BLACKWELL / M	
558	/*ABORT STAGING			*	*	*2.0		N+C - E. ALLEN /R	
MA9F	*ESTIGATION	*	1	*	*	*	*IC WIND TUNNE	L*- I. FOSSLER/MS	C *
CR-120,	D89*	*	,	*	*	*	*	*V. W. SPARKS	*
	*	*	1	*	*	*	*	∗J. R. ZILER	*
	*	*	:	*	*	*	*	*-DMS	*
	*	*	>	*	*	*	*	*	*
MSFC	- *AERODYNAMIC C			*DETERMINE STATI		*0.0049	•	*JOSH JOHNSON /M	
14TWT 554	- *CTERISTICS OF /*62-INCH DIAME			*AERODYNAMIC CHA *CTERISTICS OF 1		*0.6 - *3.48	*MSFC -	*C ~ W. D. RADFO N*/NSI - J. RAMPY	
SA1F	*SOLID ROCKET			*-INCH DIAMETER		*3.40	*IC WIND TUNNE		/ *
	90*TER WITH AND			*B(PRR) WITH AND		*	* TO WIND TOWNS	*V. W. SPARKS	*
01. 120,	*OUT STRAKES	*		*ITHOUT STRAKES		*	*	*J. R. ZILER	*
	*	*	,	*	*	*	*	*-DMS	*
	*	*	•	*	*	*	*	*	*
	1								
						1 1		i i	
				4				1,1	
	•				,	' 1	1		

			WIND TUNNEL	TEST / DMS DATA	PROCESSING	` -		106
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST		* CONFIGURATIONS				.E* TESTING	* TEST DMS	
10	* REPORT TITLE	* TESTED	* PURPOS	SE * TEST	*MACH RANG	E* AGENCY	* PERSONNEL	*OR COMMENTS
ARC	- *EFFECT OF GASEOUS						*J.B.DODS,JR.,/	
97 SW T	- *AND SOLID SIMULA	- • - •	-		*1.6 - *2.2	*ARC -	*/ET AL -FO*V. W. SPARKS	*FEB., 1974
616 IA2	/*TED JET PLUMES OF *AN O4OA SPACE	V *	*TROL CHARAC *ICS	1EK121*	*2.2		C *B. J. FRICKEN	
	762*SHUTTLE LAUNCH CO	1∗	*103	*	*	*WIND TUNNEL		*
CK-120,	*NFIGURATION AT MA		*	*	*	*NITARY)	*	*
	*CH NUMBERS FROM		*	*	*	*	*	*
	*.6 TO 2.2	*	*	*	*	*	*	*
	*	*	*	*	*	* .	*	*
LARC	- *RESULTS OF SUPERS	S*NR PRR-SSV ORBIT	E*SUPERSONIC	AERODY*FORCE	*0.015 /	/ *LARC /		ME*DMS~DR~2014
UPWT	- *ONIC TESTS IN TH	E*R	*NAMIC CHARA	ACTERIS*	*2.5 -	*LARC -	*NNELL /NR	*MARCH, 1973
1007	/*LARC UNITARY PLA		*TICS	*	*4.6		N W*J. E. VAUGHN	*
OA7	*N WIND TUNNEL ON	*	*CONTROL EFF	FECTIVE*	*	*IND TUNNEL	*B. J. FRICKEN	*
CR-128,	753*A .015 SCALE MOD	E*	*NES\$	*	*	*	*-DMS	*
	L NR-PRR SPACE SI	H	*MODEL COMPO	DNENT E*	*	*	*	*
	*UTTLE ORBITER	*	*FFECTS	*	*	*	*	*
	•	*	*WING AREA-1	THICKNE*	*	*	*	*
	*	*	*SS SURVEYS	*	*	*	*	*
	*	*	*	*	*	* / /	*	* C.*DMS-DR-2015
LTV	- *AERODYNAMIC RESU				*0.0075 / *2.4 -		*ZIEGLER, VSD	*VOLUME 01
HSWT 458	- *TS OF SEPARATION /*TESTS IN THE VOU				*4.39	*M3C /		PR*JULY, 1973
1A4	*HT AERONAUTICS 4		*RAL-DIRECT		*4.35		WIN*IGGE /ROCKWELL	
	091*4FT HSWT ON A .O		*TABILITY AN		*	*D TUNNEL	*J. E. VAUGHN	*
CK 120,	*75 SCALE ROCKWEL	=	*ROL CHARACT		*	*	*B. J. FRICKEN	*
	*INTERNATIONAL-AT		*CS	*	*	*	*-DMS	*
	*P SHUTTLE INTEGR		*	*	*	*	*	*
	*TED VEHICLE		*	*	*	*	*	*
	*	*	*	*	*	*	*	*
LTV	- *AERODYNAMIC RESU	L*NASA SSV ORBITER	*EFFECTS OF	BSRM S*FORCE	*0.0075	/ *MSC /	*P. ROMERE/JSC.	C.*DMS-DR-2015
HSWT	- *TS OF SEPARATION				*2.4 -	*LTV -	*ZIEGLER, VSD	∗VOLUME O2
458	/*TESTS ON THE VOU	G*INGLE BSRM	*ITUDINAL A	ND LATE*	*4.39	*HIGH SPEED !	WIN+J. RILEY, J. S	S. P*JULY, 1973
IA4	*HT AERONAUTICS 4	F*	*RAL-DIRECT	IONAL S*	*	*D TUNNEL	*RIGGE/RI	*
CR-120,	O91*T X 4FT HSWT ON	A *	*TABILITY A		*	*	∗J. E. VAUGHN	*
	*.0075 SCALE ROCK		*ROL CHARAC	TERISTI*	*	*	*B. J. FRICKEN	*
	*WELL INTERNATION	e i	*CS	*	*	*	*-DMS	*
	*L-ATP SHUTTLE IN	The state of the s	•	* :	*	*	*	*
	*EGRATED VEHICLE	*	*		*	* * '	* '	*
•	1.★	*	*	*	*	* 1 1	, *	*

						WIND TO	JNNEL TEST	/ DMS DAT	A PROCESSING	i				10
	*			*		*		*	*MODEL	*		COGNIZANT	* BAS	
TEST ID	*	REPORT	TITLE	*	CONFIGURATIONS TESTED		TEST PURPOSE	* TYPE OF	F * SCAL *MACH RANG		: : - -	* TEST DMS * PERSONNEL	*PUBLIC.	
LAD	- *RF	SULTS 0	F INVES	T + NI	R ATP ORBITER	*SUBSQI	NIC AERODYN	A*FORCE	*0.0405 /	*NR /	,	*R. MENNELL /NR	*DMS-DR	-2016
WT		ATIONS					HARACTERIST		*0.165-	*NRLAD -		R. SINGELLTON	*APRIL,	
9		5 SCALE				*CS		*	*0.26	*LOW SPEED	WIND	*-DMS	*	
2		VERSIO				*		*	*	*TUNNEL	,		*	
-120,0		S-SSV OR				*		*	*	*	:		*	
		IE NORTH I AERONA				*		*	*	*	,	•	*	
		ORATORY				*		*	*	*		•	*	
		WIND T	_	*		*		*	*	*	,	•	*	
	*			*		*		*	*	*	,	k	*	
.AD	- *RE	SULTS 0	F INVES	ST+N	R ATP ORBITER	*SUBSOI	VIC AERODYN	A*FORCE	*0.0405 /	*NR /	2	R. KINGSLAND /NR	*DMS-DR	-2017
IT	- *IG	ATIONS	ON A O.	0*		*MIC C	HARACTERIST	I *	*0.165 -	*NRLAD -		R. SINGELLTON	*APRIL,	197
)		5 SCALE				*CS		*	*0.26	*LOW SPEED	WIND:	*-DMS	*	
i 		VERSIO				*		*	*	*TUNNEL	,	k	*	
123,8		-SSV OR				*		*	*	*	,		*	
		IE NORTH I AERONA				*		. * * ±	*	*	,		*	
		ORATORY				*		*	*	*	,	k	*	
		WIND T		*		*		*	*	*	,	k	*	
	*			*		*		*	*	*		k	*	
.AD	- *CR	OSS WIN	D LOADS	*A	TP LAUNCH CONFI	G*CROSSI	WIND LOADS	*FORCE	*0.01925 /	*NR /	2	L.S. KATOW /RI	*DMS-DR	-2018
/T		IVESTIGA			RATION	*.		*	*0.069-	*NRLAD -		*T. L. MULKEY	∗JUNE ,	197
1	•	.01925		-		*		*	*0.25			S. W. BROWN	*	
) 		L OF TH		-		*		*	*	*TUNNEL	,	×-DMS	*	
128,		LAUNCH	CUNF I GU	3R*		*		*	*	*	,	k	*	
	*AI	ION		*		*		*	*	*	,		*	
.AD		W CDEED	LONGIA		TP AND PRR ORBI	T+TNVFC	TICATE CONE	* !*EUDCE	*0.0405 /	* *NR /		R. B. KINGSLAND/	D*DMS-DD	-2019
Ť		NAL AND					ION VARIABL		*0.165-	*NRLAD -		OCKWELL	*JUNE.	197
ï		ABILITY			•		IMPROVE TOU	_	*0.26			T. L. MULKEY	*	
i	*TE	RISTICS	OF A F	* S		*HDOWN	LIFT	*	*	*TUNNEL		D. A. SARVER	*	
128,7	'56*PR	R SHUTT	LE ORBI	(T*		*CAPAB	ILITIES	*	*	*	,	-DMS	*	
	*ER	CONFIG	URATION	1 *		*		*	*	*	. 1	ŧ	*	
	*			*		*		*	*	*	*	k .m. m. 148	*	
AD					RR ORBITER		ZE PRR PLAI		*0.0405 /	*NR /		R. B. KINGSLAND,		
T	2	TION OF					VING IN AND		*0.16 -	*NRLAD -		L. KATOW /RI	*JUNE,	197
i :		ANFORM IN AND				*001 01	GROUND EF	Γ -	*0.26 *	*LUW SPEED		PD. A. SARVER F-DMS	*	
		OUND EF		*		*			*	* I OM45 F	1 1	. השח ח	*	
.20,	J. Fuk	COND EF				-		-	,				•	

		WIND TUNNEL TEST / DMS DATA	PROCESSING	108
	* *	* *	*MODEL * * COGNIZANT	* BASIC
TEST ID		S * TEST * TYPE OF * PURPOSE * TEST	* SCALE* TESTING * TEST DMS *MACH RANGE* AGENCY * PERSONNEL	*PUBLICATIONS *OR COMMENTS
NRLAD LSWT	- *PRESSURE LOADS AN*-89A ORBITER	*PRESSURE LOADS DA*PRESSURE	*0.2 - *NR / *R. MENNELL /ROO	CKW*DMS-DR-2021 *VOLUME 01
699	- *D AERODYNAMIC FOR* /*CE INFORMATION FO*	*TA IN GROUND EFFE* *CT *	*O.2 *NRLAD ~ *ELL * *LOW SPEED WIND*H. C. ZIMMERLE	
DA45	*R THE -89A SPACE *	* *	* *TUNNEL *-DMS	*
	.758*SHUTTLE ORBITER C*	* *	* * *	*
	*ONFIGURATION *	* *	* *	*
	* *	* *	* *	*
NRLAD	- *PRESSURE LOADS AN*-89A DRBITER	*PRESSURE LOADS DA*PRESSURE	*0.2 - *NR / *R. MENNELL /RO	
LSWT	- *D AERODYNAMIC FOR*	*TA IN GROUND EFFE*	*0.2 *NRLAD - *ELL	*VOLUME 02
699	/*CE INFORMATION FO*	*CT *	* *LOW SPEED WIND*H. C. ZIMMERLE	*OCT., 1973
OA45	*R THE -89A SPACE *	* *	* *TUNNEL *-DMS	*
CK-128,	,758*SHUTTLE ORBITER C*	* *	* * *	#
	*ONFIGURATION *	* *	* * *	*
NRLAD	- *AERODYNAMIC CHARA*RI -89B ORBITER	*LONGITUDINAL AND *FORCE	*0.0405 / *NR / *R. B. KINGSLAN	n /*nms-np-2022
LSWT	- *CTERISTICS OF THE*	*LATERAL-DIRECTION*	*0.16 - *NRLAD - *RI	*JUNE. 1973
698	/*ROCKWELL INTERNA *	*AL STABILITY LEVE*	*0.26 *LOW SPEED WIND*T. L. MULKEY	*
0A10	*TIONAL -89B SPACE*	*LS *	* *TUNNEL *S. W. BROWN	*
_	.759*SHUTTLE ORBITER *	* *	* * * DMS	*
•	*CONFIGURATION *	* *	* *	*
	* *	* *	* *	*
LARC	- *STATIC AERODYNAMI*LO-100 ORBITER	*DETERMINE HYPERSO*FORCE	* 0.0050 / *LARC / *D. STONE /LARC	
22HT	- *C CHARACTERISTICS*	*NIC PERFORMANCE, *	*20.30- *LARC - *V. W. SPARKS	*JUNE, 1973
411	/*AND OIL FLOW AND *	*STATIC STABILITY *	*20.30 *22-INCH HELIUM*D. A. SARVER	*
LA2	*ELECTRON BEAM *	*AND CONTROL *	* *TUNNEL *-DMS	*
CR-128,	,763*RESULTS OF A 0.00*	*EFFECTIVENESS AND*	* * *	*
	5 SCALE MODEL LAN *GLEY CONCEPT SPAC*	*EXAMINE FLOW ABO *	* * *	*
	E SHUTTLE ORBITER	*UT THE LO-100 ORB* *ITER *		
	(LO-100) AT A MAC	* * *	* * *	*
	*H NUMBER OF 20.3 *	* *	* *	*
	* *	* *	* *	*
ARC	- *WIND TUNNEL TEST *040A SPACE SHUT	TL*STABILITY AND CON*FORCE	*0.019 / *ARC / *R. B. HARDIN /	RI *DMS-DR-2024
11TWT	- *OF THE 0.019 (040*E INTEGRATED VE	HI*TROL DATA, WING P*PRESSURE		*AUGUST, 1973
686	/*A) JET PLUME SPAC*CLE	*RESSURE AND NOZZL*	*1.2 *11-FOOT TRANSO*W. M. HALE	*
IA7	*E SHUTTLE INTEGRA*	*E PRESSURE DISTRI*	* *NIC WIND TUNNE*-DMS	* ' '
CR-128,	,766*TED VEHICLE IN TH*	*BUTIONS *	* *L (UNITARY) *	*
	E ARC 11-FOOT UNI	· *		*
	*TARY WIND TUNNEL *	*		*
	* *	* *	* *	*

.

			WIND TUNNE	TEST / DMS DAT	A PROCESSING			109
	* .	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGU	RATIONS * TES	T * TYPE 0	F * SCALE	* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TES	TED * PURPI	SE * TEST	*MACH RANGE	* AGENCY	* PERSONNEL	*OR COMMENTS
MSFC			DIAMETER*DETERMINA		*0.00563 /			N /*DMS-DR-2025
14TWT			AND WIT *STATIC AE				*NASA/MSFC	*MAY, 1973
5 65	/+42-INCH DIAMETI	ER *HOUT STRA					RISON+WALTER D. RADF	ORD*
SA3F		*	*NTS WITH (*	*IC WIND T	-· -	*
CR-128,	767*BOOSTER WITH A		*T BUILD-U	*	*	*	*V. W. SPARKS	*
	*WITHOUT STRAKES	\$ *	*	*	*	*	*A. T. KAVANAUG	H *
	*	*	*	*	*	*	*-DMS	*
	*	*	*	*	*	*	*	*
MSFC	- *ARODYNAMIC INV	EST*MCR 0074	BASELINE*DETERMINE	THE EFF*FORCE	*0.004 /	*MSFC /	*PAUL RAMSEY/MS	FC *DMS-DR-2026
14TWT	- *IGATIONS ON A	D.O*LAUNCH VE	HICLE *ECTS OF MO	DDEL PAR*		*MSFC -	*- M. K. ROBERT	SON*SEPT., 1973
5 66	/*O4 SCALE MODEL	MC*	*AMETRIC V	ARIATION*	*.2	*14-INCH T	RISON*/NORTHROP	*
IA31F	*R 0074	*	*S ON AEROL	YNAMIC *	*	*IC WIND TO	UNNEL*V. W. SPARKS	*
CR-128,	778*BASELINE SPACE	SH*	*STATIC STA	ABILITY *	*	*	*B. W. MYERS	*
	UTTLE LAUNCH V	EHI	*CHARACTER	ISTCS OV+	*	*	*-DMS	*
	CLE AT MACH NO	. B	*ER A MACH	NO. RAN*	*	*	*	*
	*ETWEEN	*	*GE OF 0.6	TO 4.96*	*	*	*	*
	*0.6 AND 4.96	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
MSFC	- *AN INVESTIGATION	ON *ORB. WITH	FT AND *	*PRESSURE	*0.004 /	*MSFC /	*P. E. RAMSEY /	MSF*DMS-DR-2027
14TWT	- *IN THE NASA MSI		*	*		*MSFC -	*C	*VOLUME 01
567	/*14-INCH TRISON		*	*			RISON*V. W. SPARKS	*SEPT., 1975
IA32FB	*WIND TUNNEL TO		*	*	*	*IC WIND T	UNNEL*M. M. MOSER UR	}. *
CR-141.1	BO7*TERMINE THE PRI		*	*	*	*	*-DMS	*
	*URE DISTRIBUTION		*	*	*	*	*	*
	*OVER THE COMPOR		*	*	*	*	*	*
	*TS OF A 0.004		*	*1	*	*	*	*
	*LE VERSION OF		*	*."	*	*	*	*
	*ROCKWELL MCR O		*	*	*	*	*	*
	*4 BASELINE SHU		*		*	*	*	*
	*E ASCENT CONFIC		*	*	*	*	*	*
	*ATION (IA32FB)		*	*	*	*	*	*
	*	*	*	*	*	*	*	*

TEST TYPE OF MACH RANGE AGENCY PEST DMS PURPOSE TEST TYPE OF MACH RANGE AGENCY PEST DMS PEST DMS PURPOSE TEST DMS PEST DMS P				WIND TUN	NEL TEST /	/ D	MS DATA	PROCE	SSING						110
TEST		*	*	*		*		*MODE!	 L	*		*	COGNIZANT	* BAS	IC
MSFC - *AN INVESTIGATION *ROB. WITH ET AND *DETERMINE PRESSUR*PRESSURE		*		*	TEST	*	TYPE OF	*	SCALE	* TESTI	۱G ،	*	TEST DMS		
14THT - *IN THE NASA MSFC *2 SRB'S	ID	* REPORT TITLE	* TESTED	* PU	RPOSE	*	TEST	*MACH	RANGE	* AGENC	Y ,	* 	PERSONNEL	*OR COM	MENTS
S67	MSFC -	*AN INVESTIGATION	*ROB. WITH ET AND	*DETERMI	NE PRESSUR	R*PR	ESSURE	*0.00	4 /	*MSFC	/	*P.	E. RAMSEY /	MS*DMS-DR	-2027
IA32FB *WIND TUNNEL TO DE*	14TWT -	*IN THE NASA MSFC	*2 SRB'S	*E DISTR	IBUTION OV	V*		*0.6	-	*MSFC	- :	*FC		*VOLUME	02
CR-141,808*TERMINE THE PRESS*	567	/+14-INCH TRISONIC	*	*ER ET,	SRB, ORBIT	T*		*4.96		*14-INCH	TRISON	*۷ .	W. SPARKS	*OCT.,	1979
*URE DISTRIBUTION *	IA32FB	*WIND TUNNEL TO DE	*	*ER WING	ı	*		*		*IC WIND	TUNNEL:	∗М.	M. MOSER JR.	*	
**OVER THE COMPONEN*	CR-141,80	8*TERMINE THE PRESS	*	*		*		*		*	:	* - DN	IS	*	
TS OF A 0.004 SCA		*URE DISTRIBUTION	*	*		*		*		*	:	*		*	
LE VERSION OF THE *ROCKWELL MCR OO7 *		*OVER THE COMPONEN	 *	*		*		*		*	:	*		*	
*ROCKWELL MCR 007 *		*TS OF A 0.004 SCA	*	*		*		*		*	:	*		*	
4 BASELINE SHUTTL		*LE VERSION OF THE	*	*		*		*		*	:	*		*	
E ASCENT CONFIGUR				*		*		*		*	:	*		*	
* * * * * * * * * * * * * * * * * * *		*4 BASELINE SHUTTL	*	*		*		*		*	:	*		*	
*		=	*	*		*		*		*	:	*		*	
14TWT - *IN THE NASA MSFC *		*ATION (IA32F)	*	*		*		*		*		*		*	
14TWT - *IN THE NASA MSFC *		*	*	*		*		*		*		*		*	
567							ESSURE				•			_	
IA32FB *WIND TUNNEL TO DE*															
CR-141,809*TERMINE THE PRESS*		•				T *		*4.96						*OCT.,	197
*URE DISTRIBUTION *				*ER WING	i	*		*		*IC WIND	TUNNEL	* ~ DN	4S	*	
OVER THE COMPONEN	CR-141,80			*		*		*		*		*		*	
TS OF A O.004 SCA				*		*		*		*		*		*	
LE VERSION OF THE				*		*		*		*		*		*	
*ROCKWELL MCR 007 *				*		*		*		*		*		*	
4 BASELINE SHUTTL				*		*		*		*		*		*	
E ASCENT CONFIGUR				*		*		*		*		*		*	
- 11411 114 114				*		*		*		*		*		*	
*ATION (IA32F) *			! *	*		*		*		*		*		*	
* * * * * * * * *		*ATIUN (IA32F)	*	. *		*		*		*		*		*	
		*	*	*		*		*		*		*		*	

))
	••••	·	WIND TUNNEL TEST /	DMS DATA	PROCESSING			111
TEST ID	* * * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE	-	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
C WT 1FB 134,4	- *TRIPLE BALANCE TE - *ST OF THE PRR BAS /*ELINE SPACE SHUTT *LE CONFIGURATION 434*(TWT 570) * * * * * * * * * * * * * * * * * * *	S*LAUNCH F*	*TO OBTAIN FORCE A *ND MOMENT DATA FO *R THE MCR OO74 OR *BITER (PRR BASELI *NE), EXTERNAL TAN *K, AND SOLID ROCK *ET BOOSTER IN THE *LAUNCH CONFIGURA *TION AND TO IDENT *IFY KEY SIMULATIO *N PARAMETERS TO B *E USED IN LAUNCH *VEHICLE WIND TUNN *EL TESTS	* * * * * * * * * * * * * * * * * * * *	*0.004 / *0.6 - *4.96 * * * * * * * * * * *		*P.RAMSEY/NASA *T.DAVIS/NSI SON*V. W. SPARKS NEL*R. B. LOWE *-DMS * * * * * * * * * * * * * * * * * * *	*DMS-DR-2028 *VOLUME 01 *DEC., 1974 * * * * * * * * * * * * * *
FC TWT O 31FB -134,4	* - *TRIPLE BALANCE TE - *ST OF THE PRR BAS /*ELINE SPACE SHUTT *LE CONFIGURATION 436*(TWT 570) * * * * * * * * * * * * * * * * * * *	S*LAUNCH T*	*	* * * * * * * * * * * * * * * * * * * *	* *0.004 / *0.6 - *4.96 * * * * * * * * * * * * * * * * * * *		* *P. RAMSEY/NASA *T. DAVIS/NSI SDN*V. W. SPARKS NEL*R. B. LOWE *-DMS * * * * *	* *DMS-DR-2028 *VOLUME 02 *DEC 1974 * * * * * * * * * * * * * * *
SFC 4TWT 6447 7-128,7	* - *RESULTS OF A STAT - *IC STABILITY AND /*CONTROL EFFECTIVE *NESS INVESTIGATION 765*N OF A 0.004 SCAL *E 2A ORBITER IN T *HE MARSHALL SPACE *FLIGHT CENTER TR *ISONIC WIND TUNNE *L (MACH=0.6-4.96) *	*2A ORBITER WITH S *YMETRICAL WING *ORBITER BUILDUP * * * * *	* *DETERMINE STATIC S*STABILITY AND CON *TROL EFFECTIVENES *\$ * * * * * * * * * * * *	 *	* 0.004 / *0.6 - *4.96 * *	*MSFC / *MSFC - *14-INCH TRIS *IC WIND TUNN * * * * * *	* **E.C. ALLEN, T. T *TTLE, T. FOSTER SON*ROCKWELL NEL*J. E. VAUGHN *W. R. MORGAN *-DMS * * * * * * *	

					WIND	TUNNEL TEST	/ DI	IS DATA	PROCES	SING						112
	*		*		*		*		*MODEL		*		*	COGNIZANT	* BAS	SIC
TEST	*		* (CONFIGURATIONS	*	TEST	* 1	YPE OF			* TESTIN	G	*	TEST DMS	*PUBLIC	CATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST			* AGENCY		*	PERSONNEL	*OR COM	MENTS
IRLAD	- *	AERODYNAMIC CHARA	*-89	B ROCKWELL INT	*AFT	-END CONFIGUR	A*FOF	RCE	*0.040)5 /	*NR	/	*R.	B. KINGSLAND	/*DMS-DR	₹-2030
.SWT	- *	CTERISTICS OF VAR	*ERI	NATIONAL SPACE	*TIO	N EFFECTS ON I	L*		*0.16	-	*NRLAD	-	*RI		*AUGUST	Γ, 1973
'00	/*	IOUS AFT-END CONF	*SHI	JTTLE ORBITER	*IFT	, DRAG AND PI	T*		*		*LOW SPEE	D WIND	*T.	L. MULKEY	*	
A14	*	IGURATIONS OF THE	*		*CHI	NG MOMENT	*		*		*TUNNEL			M. HALE	*	
R-128,	768*	ROCKWELL INTERNA	*		*		*		*		*		* - DN	IS	*	
		TIONAL -89B SPACE			*		* .		*		*		*		*	
	*	SHUTTLE ORBITER	*		*		*		*		*		*		*	
	*		*		*		*		*		*		*		*	
ARC	- *	HYPERSONIC PERFOR	*LO	-100 ORBITER	*ELEV	VON AND BODY	F*FO	RCE	*0.010) /	*LARC	/	*PET	ER T. BERNOT	/*DMS-DR	R-2031
FHT		MANCE. STABILITY				EFFECTIVENES			*10.3			•	*LAR		*JUNE.	
5		AND CONTROL CHARA			*		*		*			US-FLO	1*V.	W. SPARKS	*	
.A3		CTERISTICS OF A C			*		*		*		*W HYPERS				*	
R-128.		.010 SCALE MODEL			*		*		*		*UNNEL		*-DN		*	
		OF A LANGLEY CONC			*		*		*		*		*	· -	*	
		EPT SPACE SHUTTLE			*		*		*		*		*		*	
		ORBITER	*		*		*		*		*		*		*	
	*		*		*		*		*		*		*		*	
RC	- *	RESULTS OF TESTS	* 17	-OTS	*TO 1	OBTAIN AERODY	N*FO	RCE	* 0:03	80 /	*ARC	/	*G11	LENS. SPANGL	FR*DMS-DE	2-2032
1TWT		OA12 AND IA9 IN T				C LOADS ON LA			* 0.6	- •	*ARC	•	*/R1		*VOLUME	
07		HE AMES RESEARCH				VEHICLE	*		*1.4					C. ZIMMERLE	*NOV	
7SWT	•	CENTER UNITARY	*		*	V OL .	*		*		*NIC WIND				*	
07		PLAN WIND TUNNELS	*		*		*		*		*L (UNITA				*	
		ON AN O.030-SCAL			*		*		*		*8-FOOT B				*	
A12A.C		E MODEL OF THE SP			*		*		*		*OT SUPER				*	
			*		*		*		*		*WIND TUN				*	
1 120,		VEHICLE 2A TO DET			*		*		* .		*NITARY)	(C	*			
		ERMINE AERODYNAMI					-				***************************************		-		*	
		C LOADS	. "		-		-		*				*		*	
		C LOADS	*		*		-		*		→ 1		-		•	
RC	- *	RESULTS OF TESTS	*17	-nrs	*TD	OBTAIN AERODY	N×FO	DCE	* 0.03	30 /	*ARC	/	*GTI	LENS, SPANGL	FD*DMS~DE	0-2032
1TWT		OA12 AND IA9 IN T		0.3		C LOADS ON LA			* 0.6			<u>-</u>	*/R			
07		HE AMES RESEARCH				VEHICLE	U		*1.4					C. ZIMMERLE	,	
7SWT		CENTER UNITARY			+14011	ACHIOCE	-		* 1.4		*NIC WIND				*NOV.,	157
07	_	PLAN WIND TUNNELS			_		-				*L (UNITA			13	- -	
		ON AN O.030-SCAL			<u>.</u>		Ţ		•		•	-			<u>.</u>	
A12A.C		E MODEL OF THE SP			<u>-</u>		Ĩ		_		*8-FOOT B					
			*		<u>.</u>		-		-		_				-	
K-140,					*		*		∓		*WIND TUN	MET: (C	 	1	*	
		VEHICLE 2A TO DET			*		*		∓	•	*NITARY)		*	1	*	
		ERMINE AERODYNAMI	. *		*		*		*		* .		*		*	
	*	C LOADS	*		*		*		*		*		*		*	
	*		*		*		*		*		*		*		*	

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	WIND TUNNEL TEST / DMS DATA	PROCESSING	1 13
* * TEST * * CONFIGURATION	* * S * TEST * TYPE OF		
ID * REPORT TITLE * TESTED	* PURPOSE * TEST	*MACH RANGE* AGENCY * PERSONNEL	*OR COMMENTS
ARC - *RESULTS OF TESTS *17-OTS	*TO OBTAIN AERODYN*FORCE	* 0.030 / *ARC / *GILLENS, SPANO	GLER*DMS-DR-2032
11TWT - *OA12 AND IA9 IN T*	*AMIC LOADS ON LAU*	* 0.6 - *ARC - */RI	*VOLUME 03
707 /*HE AMES RESEARCH *	*NCH VEHICLE *	*1.4 *11-FOOT TRANSO*H. C. ZIMMERLE	*OCT., 1973
87SWT - *CENTER UNITARY * 707 /*PLAN WIND TUNNELS*	* *	* *NIC WIND TUNNE*-DMS * *L (UNITARY) *	*
IA9A.B.C *ON AN O.O3O-SCAL *		* ** *********************************	*
OA12A.C *E MODEL OF THE SP*	* *	* *OT SUPERSONIC *	*
CR-128.794*ACE SHUTTLE *	*	* *WIND TUNNEL (U*	*
VEHICLE 2A TO DET	* *	* *NITARY) *	*
ERMINE AERODYNAMI	* *	* *	*
*C LOADS *	* *	* * *	*
* *	* *	* * *	*
ARC - *RESULTS OF TESTS *17-OTS	*TO OBTAIN AERODYN*PRESSURE	•	
11TWT - *OA 12 AND IA9 IN T*	*AMIC LOADS ON LAU*	* 0.6 - *ARC - */RI	*VOLUME 04
707 /*HE AMES RESEARCH *	*NCH VEHICLE *	*1.4 *11-FOOT TRANSO*H. C. ZIMMERLE	*DEC., 1973
87SWT - *CENTER UNITARY *	* *	* *NIC WIND TUNNE*-DMS	*
707 /*PLAN WIND TUNNELS* IA9A.B.C *ON AN O.O3O-SCAL *	* *	* *L (UNITARY) * * *8-FOOT BY 7-FO*	*
OA12A,C *E MODEL OF THE SP*	* *	* *OT SUPERSONIC *	*
CR-128.794*ACE SHUTTLE *	*	* *WIND TUNNEL (U*	*
VEHICLE 2A TO DET	* *	* *NITARY) *	*
ERMINE AERODYNAMI	* *	* * *	*
*C LOADS *	* *	* *	*
*	* *	* *	*
ARC - *RESULTS OF TESTS *17-OTS	*TO OBTAIN AERODYN*PRESSURE	* 0.030 / *ARC / *GILLENS, SPANG	SLER*DMS-DR-2032
11TWT - *0A12 AND IA9 IN T*	*AMIC LOADS ON LAU*	* O.6 - *ARC - */RI	
707 /*HE AMES RESEARCH *	*NCH VEHICLE *	*1.4 *11-FOOT TRANSO*H. C. ZIMMERLE	*DEC., 1973
87SWT - *CENTER UNITARY *	* *	* *NIC WIND TUNNE*-DMS	*
707 /*PLAN WIND TUNNELS*	* *	* *L (UNITARY) *	*
IA9A,B,C *ON AN O.O3O-SCAL * OA12A,C *E MODEL OF THE SP*		* *8-F00T BY 7-F0* * *OT SUPERSONIC *	*
CR-128,794*ACE SHUTTLE *	*	* *WIND TUNNEL (U*	*
VEHICLE 2A TO DET	*	* *NITARY) *	*
ERMINE AERODYNAMI	*	* *	*
*C LOADS *	* *	* *	, *
*	* *	* * *	* *
			•
		$e^{-i\phi}$. The second of $e^{-i\phi}$. The second of $e^{-i\phi}$	

					MIND	TUNNEL TEST		JMS DATA	PRUCES	21140					-		11
	*		*		*		*		*MODEL		*		*	COGNIZ	ANT	* BASIC	2
TEST				CONFIGURATIONS		TEST		TYPE OF				TESTING		TEST DM	_	*PUBLICAT	
ID	*	REPORT TITL	E *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	*	AGENCY	*	PERSON	NEL	*OR COMME	:N15
						- '											
RC		RESULTS OF TE	_			BTAIN AEROD		RESSURE								*DMS-DR-2	
		DA12 AND IA9				LOADS ON L			* 0.6		*AR			PI		*VOLUME (-
07		HE AMES RESEA			*NCH	VEHICLE	*		*1.4			I-FOOT TRAI	-		ERLE	*DEC.,	19
7SWT		CENTER UNITAR			*		*		*			C WIND TU		MS		*	
07	•	PLAN WIND TUN			*		*		*		_	(UNITARY)				*	
		DN AN 0.030-S			*		*		*		_	FOOT BY 7	_			*	
112A,C		E MODEL OF TH	E SP*		*		*		*			SUPERSON				*	
₹-128,		ACE SHUTTLE	*		*		*		*			IND TUNNEL	(U*			*	
		VEHICLE 2A TO			*		*		*		*NI	ITARY)	*			*	
		ERMINE AERODY	NAMI*		*		*		*		*		*			*	
	*	C LOADS	*		*		*		*		*		*			*	
	*		*		*		*		*		*		*			*	
₹C		RESULTS OF TE		7-OTS		BTAIN AEROD		RESSURE								*DMS-DR-	
ITWT		OA12 AND IA9				LOADS ON L	-AU*		* 0.6		*AF		, .			*VOLUME (
) 7		HE AMES RESEA			*NCH	VEHICLE	*		*1.4		-	1-FOOT TRAI		-	IERLE	*DEC.,	19
		CENTER UNITAR			*		*		*			IC MIND TU		DMS		*	
07	/*	PLAN WIND TUN	NELS*		*		*		*			(UNITARY)				*	
49A,B,	C *	ON AN 0.030-5	CAL *		*		*		*		-	-FOOT BY 7	_			*	
412A,C	*	E MODEL OF TH	IE SP*		*		*		*		*01	T SUPERSON	IC *			*	
₹-128,	794*	ACE SHUTTLE	*		*		*		*		*W]	IND TUNNEL	(U*			*	
	*	VEHICLE 2A TO	DET*		*		*		*		*N]	ITARY)	*			*	
	*	ERMINE AERODY	NAMI*		*		*		*		*		*			*	
	*	C LOADS	*		*		*		*		*		*			*	
	*		*		*		*		*		*		*			*	
€C	- *	RESULTS OF TE	STS +1	7-0TS	*TO 0	BTAIN AERO	OYN*P	RESSURE	* 0.03	30 /	*AF	RC /	*G	ILLENS, S	PANGLER	*DMS-DR-	203
ITWT	- *	OA12 AND IA9	IN T*			LOADS ON I			* 0.6	-	*AF	RC -	*/F	?I		*VOLUME (80
07	/*	HE AMES RESEA	RCH *		*NCH	VEHICLE	*		*1.4		*1	1-FOOT TRA	NSO*H.	. C. ZIMM	IERLE	*DEC.,	19
7SWT	- *	CENTER UNITAR	Y *		*		*		*		*N3	IC WIND TU	NNE * - [DMS		*	
7	/*	PLAN WIND TUN	NELS*		*		*		*		*L	(UNITARY)	*			*	
49A,B,	C *	ON AN 0.030-9	CAL *		*		*		*		*8-	-FOOT BY 7	-F0*			*	
A12A,C	*	E MODEL OF TH	IE SP*		*		*		*		*01	T SUPERSON	IC *			*	
2-128,	794*	ACE SHUTTLE	*		*		*		*		*W]	IND TUNNEL	(u*			*	
,	*	VEHICLE 2A TO	DET*		*		*		*		*N]	ITARY)	*			*	
	*	ERMINE AERODY	'NAMI*		*		*		*		*		*			*	
	*	C LOADS	*		*		*		*		*		*			*	
	*		*		*		*		*		*		*			*	
	1																

							WIND	TUNNEL TEST	1	DMS DATA	PROCES	SSING			_				11
		*		*			*		*		*MODEL		*		*	COGNI	ZANT	* BAS	IC
TEST	•	*		*	CON	FIGURATIONS		TEST		TYPE OF			* TEST		*	TEST DI		*PUBLIC	
ID		*	REPORT TITLE	*		TESTED	* 	PURPOSE		TEST	*MACH	RANGE	* AGEN	CY 	* 	PERSO	NNEL 	*OR COM	MENIS
ADC		+056	SULTS OF TES	TC 44	7 - OT	•	*TO (OBTAIN AEROD	VN+D	DEECHDE			***	,	+011	LENC	CDANCE FE	3*DNC-DD	-1022
ARC 11TWT			12 AND IA9 I		/-01:	S		C LOADS ON L		KESSUKE	* 0.0		*ARC	_	*G10		SPANGLER	R*DMS-DR *VOLUME	
707			AMES RESEAR					VEHICLE	*		*1.4		*11-F00	T TDANS			MEDIE		
87SWT	•		NTER UNITARY				*	VE1110EC	*		*		*NIC WI					*	
707			AN WIND TUNN				*		*		*		*L (UNI					*	
			AN 0.030-SC	-			*		*		*		*8-F00T					*	
OA12A.C			MODEL OF THE				*		*		*		*OT SUPI					*	
			E SHUTTLE	*			*		*		*		*WIND TO	-				*	
		*VEH	HICLE 2A TO	>TEC			*		*		*		*NITARY		*			*	
		ERM	MINE AERODYN	AMI			*		*		*		*	•	*			*	
		*C l	LOADS	*			*		*		*		*		*			*	
		*		*			*		*		*		*		*			*	
ARC	-	*RES	SULTS OF TES	TS *1	7-OT	3	*T0 (OBTAIN AEROD	YN*P	RESSURE	* 0.03	30 /	*ARC	/	*GIt	LENS,	SPANGLER	*DMS-DR	-2032
11TWT	-	*0A	12 AND IA9 I	N T*			*AMI	C LOADS ON L	¥UΑ		* 0.6	-	*ARC	-	*/R1			*VOLUME	10
7 07	/	/*HE	AMES RESEAR	CH *			*NCH	VEHICLE	*		*1.4		*11-F001	T TRANS	D*H.	C. ZIM	MERLE	*JAN.,	197
87SWT	-	*CEN	NTER UNITARY	*			*		*		*		*NIC WIT	ND TUNNI	E * - DN	AS		*	
7 07	/	/*PL/	NUT CHIW NA	ELS*			*		*		*		*L (UNI1	TARY)	*			*	
			AN 0.030-SC				*		*		*		*8-F00T	BY 7-F	D*			*	
			MODEL OF THE	SP*			*		*		*		*OT SUP					*	
CR-128,			E SHUTTLE	*			*		*		*		*WIND TO		J*			*	
			HICLE 2A TO				*		*		*		*NITARY)	*			*	
			MINE AERODYN	AMI*			*		*		*		*		*			*	
		*C F	LOADS	*			*		*		*		*		*			*	
		*		* .		_	*		*		*		*		*			*	
ARC			SULTS OF TES		7-019	5		OBTAIN AEROD		RESSURE			*ARC	/			SPANGLER	R*DMS-DR	
11TWT			12 AND 1A9 1					C LOADS ON L	AU*		* 0.6	-	*ARC		*/R1			*VOLUME	
707	•		AMES RESEAF				*NCH	VEHICLE	*		*1.4		*11-F001				MERLE	*JAN.,	197
87SWT			NTER UNITARY				*		*		*		*NIC WIN			15		*	
707			AN WIND TUNN	-			*		*		*		*L (UNII					*	
			AN O.O3O-SC MODEL OF THE				*		*		*		*8-F00T					*	
OA12A,C			SHUTTLE	3P*			*				*		*OT SUPE					*	
CK-128,			HICLE 2A TO				Ţ.		-		-				J. .			*	
			MINE AERODYN				*		-		•		*NITARY)	,	*			*	
			LOADS	*			*				*		*		*			*	
:		*	-0,00	*			*		*		*		*	!	*			*	
		•		i ·		1 1						1		!	7			•	
!		- 1		1 !		1 1			i 1	1		'		4.7	1				

RC - 1TWT - 07 / 7SWT - 07 / A9A,B,C A12A,C R-128,794	* * * * * * * * * * * * * * * * * * *	17-OTS	* *TO OB	LOADS ON LA	* TYPE OF * TEST 	*MACH R	RANGE *	ARC -	*G: */f */f RANSO*H TUNNE*-I Y) *	. C. ZIMMERLE	*PUBLICA *OR COMM 	ATION: MENTS -2032 12
ID RC - 1TWT - 07 / 7SWT - 07 / 49A,B,C R-128,794	* REPORT TITLE * *RESULTS OF TESTS * *OA12 AND IA9 IN T* /*HE AMES RESEARCH * *CENTER UNITARY * /*PLAN WIND TUNNELS* *ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *	TESTED	* *TO OB *AMIC	PURPOSE TAIN AERODY LOADS ON LA	* TEST N*PRESSURE U*	*MACH R * 0.030 * 0.6 -	RANGE *	AGENCY ARC / ARC - 111-FOOT T NIC WIND	*G: */f */f RANSO*H TUNNE*-I Y) *	PERSONNEL ILLENS, SPANG RI . C. ZIMMERLE	*OR COM! GLER*DMS-DR *VOLUME	MENTS -2032 12
RC - 1TWT - 07 / 7SWT - 07 / A9A,B,C A12A,C R-128,794	*RESULTS OF TESTS * *OA12 AND IA9 IN T* /*HE AMES RESEARCH * *CENTER UNITARY * /*PLAN WIND TUNNELS* *ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *	17-OTS	*TO OB	TAIN AERODY LOADS ON LA	N*PRESSURE U*	* 0.030 * 0.6 -) / * · * *	ARC / ARC - *11-FOOT T *NIC WIND *L (UNITAR	*G: */f */f RANSO*H TUNNE*-I Y) *	ILLENS, SPANG RI . C. ZIMMERLE	GLER*DMS-DR *VOLUME	 -2032 12
1TWT - 07 / 7SWT - 07 / A9A,B,C A12A,C R-128,794	*OA12 AND IA9 IN T* /*HE AMES RESEARCH * *CENTER UNITARY * *PLAN WIND TUNNELS* *ON AN O.030-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS * *		*AMIC	LOADS ON LA	U*	* 0.6 -	• * * *	ARC - *11-FOOT T *NIC WIND *L (UNITAR	*/F RANSO*H: TUNNE*-F Y) *	RI . C. ZIMMERLE	*VOLUME	12
1TWT - 07 / 7SWT - 07 / A9A,B,C A12A,C R-128,794	*OA12 AND IA9 IN T* /*HE AMES RESEARCH * *CENTER UNITARY * *PLAN WIND TUNNELS* *ON AN O.030-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS * *		*AMIC	LOADS ON LA	U*	* 0.6 -	• * * *	ARC - *11-FOOT T *NIC WIND *L (UNITAR	*/F RANSO*H: TUNNE*-F Y) *	RI . C. ZIMMERLE	*VOLUME	12
07 / 75WT - 07 / A9A,B,C A12A,C R-128,794	/*HE AMES RESEARCH * *CENTER UNITARY * /*PLAN WIND TUNNELS* *ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *			-		• • •	*	*11-FOOT T *NIC WIND *L (UNITAR	RANSO*H TUNNE*-I Y) *	. C. ZIMMERLE		
75WT - 07 / A9A,B,C A12A,C R-128,794	*CENTER UNITARY * /*PLAN WIND TUNNELS* *ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *		* * * * * * * * * * * * * * * * * * * *	ENTOLE	* * *	*	*	NIC WIND L (UNITAR	TUNNE * - [Y) *		* *	137
707 / A9A,B,C A12A,C R-128,794	/*PLAN WIND TUNNELS* *ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *		* * * * *		* *	*	*	L (UNITAR	Y) *	DIN 3	*	
A9A,B,C A12A,C R-128,794	*ON AN O.O3O-SCAL * *E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *		* * * * *		*	*		_ ,				
A12Á,Ċ R-128,794 RC -	*E MODEL OF THE SP* 4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS * *		* * *		*						*	
R-128,794 RC -	4*ACE SHUTTLE * *VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *		*		_	*	*	OT SUPERS			*	
RC -	*VEHICLE 2A TO DET* *ERMINE AERODYNAMI* *C LOADS *		*		*	*		WIND TUNN			*	
RC -	*ERMINE AERODYNAMI* *C LOADS * *		•		*	*		NITARY)	*		*	
RC -	*C LOADS *				*	*	*	, ,	*		*	
	* * *		*		*	*	*	k	*		*	
	+DECILITE OF TESTS +		*		*	*	*	k	*		*	
1TWT -	TRESULIS OF IESIS T	17-0TS	*T0 0B	TAIN AERODY	N*PRESSURE	* 0.030) / +	ARC /	*G	ILLENS, SPANO	GLER*DMS-DR	-2032
	OA12 AND IA9 IN T		*AMIC	LOADS ON LA	·U*	* 0.6	- ×	*ARC -	*/	RI	*VOLUME	13
07 /	/*HE AMES RESEARCH *		*NCH V	EHICLE	*	*1.4	*	11-FOOT T	RANSO*H	. C. ZIMMERLE	E *MARCH,	197
75\#T -	*CENTER UNITARY *		*		*	*	*	NIC WIND	TUNNE * -	DMS	*	
07 /	/*PLAN WIND TUNNELS*	:	*		*	*	*	L (UNITAR	Y) *		*	
A9A,B,C	*DN AN 0.030-SCAL *		*		*	*	×	*8-FOOT BY	7-F0*		*	
A12A,C	*E MODEL OF THE SP*	:	*		*	*	×	OT SUPERS	ONIC *		*	
R-128,794	4*ACE SHUTTLE *	:	*		*	*	*	*WIND TUNN	IEL (U*		*	
	VEHICLE 2A TO DET		*		*	*	*	*NITARY)	*		*	
	ERMINE AERODYNAMI		*		*	*		*	*		*	
	*C LOADS *	:	*		*	*	*	*	*		*	
	* *	r	*		*	*	,	*	*		*	
RC -	*RESULTS OF TESTS *	17-OTS	*TO 08	TAIN AERODY	N*PRESSURE	* 0.030) / ;	*ARC /		ILLENS, SPAN		
1TWT -	*OA12 AND IA9 IN T*	:	*AMIC	LOADS ON LA	\U*	* 0.6		*ARC -		RI		
07 /	/*HE AMES RESEARCH *	2	*NCH V	EHICLE	*	*1.4				I. C. ZIMMERLI	E *MARCH,	19
7SWT -	*CENTER UNITARY *	2	*		*	*		*NIC WIND		DMS	*	
07 /	/*PLAN WIND TUNNELS*	ı	*		*	* ,		*L (UNITAR			*	
A9A,B,C	*ON AN 0.030-SCAL *	:	*		*	*		*8-FOOT BY			*	
A12A,C	*E MODEL OF THE SP*	į.	*		*	*		*OT SUPERS			*	
R-128,794	4*ACE SHUTTLE *	i	*		*	*		*WIND TUNN	IEL (U∗		*	
	VEHICLE 2A TO DET		*		*	*	,	*NITARY)	*		*	
	ERMINE AERODYNAMI	r	*		*	*	1	*	*		*	
	*C LOADS *	t	*	•	*	*	•	*	*		*	
	* *	t	*		*	*	1	*	*	i	*	
1						1		: -		•		
		A Company of the Company	1	11								

			MIND	TUNNEL TEST	/	DMS DATA	PROCES	SSING						117
	* *		*		*		*MODEL	-	*	*	cod	GNIZANT	* BAS	ic
TEST 4	• •	CONFIGURATIONS	*	TEST		TYPE OF			* TESTING			T DMS	*PUBLIC	
ID 4	* REPORT TITLE *	TESTED	* 	PURPOSE	* 	TEST	*MACH	RANGE	* AGENCY	*	PEI	RSONNEL	*OR COM	MENTS
		45 075				DECOURE		. ,				C CDANOL	ED-DMC DD	
	*RESULTS OF TESTS * *OA12 AND IA9 IN T*			BTAIN AERODY LOADS ON LA		KESSURE	* 0.6		*ARC /	*4		S, SPANGL	¥VOLUME VOLUME∗	
	HE AMES RESEARCH *			VEHICLE	*		*1.4		*11-FOOT TRA			ZIMMERLE		
- ,	CENTER UNITARY *		*		*		*		*NIC WIND TU				*	
	PLAN WIND TUNNELS+		*		*		*		*L (UNITARY)				*	
IA9A,B,C	ON AN O.030-SCAL *		*		*		*		*8-FOOT BY 7				*	
OA12A,C	E MODEL OF THE SP+		*		*		*		*OT SUPERSON	IC *			*	
CR-128,794	*ACE SHUTTLE *		*		*		*		*WIND TUNNEL	. (U*			*	
	VEHICLE 2A TO DET		*		*		*		*NITARY)	*			*	
	ERMINE AERODYNAMI		*		*		*		*	*		•	*	
	C LOADS *		*		*		*		*	*			*	
7	k ************************************	47.076	*	DTATAL AFRON	*	DECCUPE	*		*	*	7 FA	CDANCI	*	-0000
	RESULTS OF TESTS *			BTAIN AERODY		KE220KE	* 0.03 * 0.6		*ARC /		ILLEN: RI	S, SPANGLI	אט-כאט∗א∍ VOLUME∗	
	OA12 AND IA9 IN T *HE AMES RESEARCH *			LOADS ON LA VEHICLE	.0.*		*1.4	_	*11-FOOT TRA			THMEDI F		
	CENTER UNITARY *		*INCH	VENICEE	*		* 14		*NIC WIND TU			LIMMENEL	*	1514
	PLAN WIND TUNNELS*		*		*		*		*L (UNITARY)		DI413		*	
	ON AN 0.030-SCAL *		*		*		*		*8-FOOT BY 7				*	
• •	E MODEL OF THE SP+		*		*		*		*OT SUPERSON				*	
CR-128,794	ACE SHUTTLE *		*		*		*		*WIND TUNNEL	(U*			*	
*	VEHICLE 2A TO DET*		*		*		*		*NITARY)	*			*	
4	FERMINE AERODYNAMI*		*		*		*		*	*			*	
	C LOADS +		*		*		*		*	*	•		*	
*	*		*		*		*		*	*			*	
	RESULTS OF TESTS *			BTAIN AERODY		RESSURE			*ARC /			S, SPANGLI		
	OA12 AND IA9 IN T*			LOADS ON LA	\U*		* 0.6	-	*ARC -		RI .		*VOLUME	
	HE AMES RESEARCH *		*NCH	VEHICLE	*		*1.4		*11-FOOT TRA			ZIMMERLE	*APRIL.	1974
	*CENTER UNITARY * *PLAN WIND TUNNELS*		*		-		*		*NIC WIND TU *L (UNITARY)		DM2		-	
- •	ON AN O.030-SCAL *		*		*		*		*8-FOOT BY 7				*	
	E MODEL OF THE SP*		*		*		*		*OT SUPERSON				*	
	ACE SHUTTLE *		*		*		*		*WIND TUNNEL				*	
	VEHICLE 2A TO DET*		*		*		*		*NITARY)	*			*	
	ERMINE AERODYNAMI*		*		*		*		•	*			*	
. *	C LOADS *		*		*		*		*	,*			*	
100	•		*	1	*		*		*	*			* .	
the state of the s	1. The state of th					*			١.					
	+ 1.7 			1 .	1 1	11	1.1							

			. 		WIND T	UNNEL TEST	/ DMS DA	TA PROCESS	ING				
	*		*		*		*	*MODEL		*	*	COGNIZANT	* BASIC
TEST	*		*	CONFIGURATIONS		TEST	_			* TESTING	*		*PUBLICATION
ID	*	REPORT	TITLE *	TESTED	*	PURPOSE	* TEST	*MACH R	ANGE:	* AGENCY	*	PERSONNEL	*OR COMMENT
RC			F TESTS *				· · · · · · · · · · · · · · · · · · ·	RE * 0.030	•	•		LLENS, SPANGL	
1TWT			IA9 IN T*			LOADS ON L	-AU∗	* 0.6 -		*ARC			*VOLUME 18
07	•		RESEARCH 4		*NCH V	EHICLE	*	*1.4				. C. ZIMMERLE	*MAY, 19
7SWT	_		NITARY *		*		*	*		*NIC WIND TUN	-	DMS	*
07			TUNNELS*		*		*	*		*L (UNITARY)	*		*
			30-SCAL 4		*		*	*		*8-FOOT BY 7-			*
A12A,C			OF THE SP	•	*		*	*		*OT SUPERSONI			*
R-128,		CE SHUTT		•	*		*	*		*WIND TUNNEL	(U*		*
			A TO DET		*		*	*		*NITARY)	*		*
			RODYNAMI	•	*		*	*		*	*		*
	*0	LOADS		•	*		*	*		*	*		*
	*	unracati	70. CT4571.	10 100 0001750	*		*	* 0.04	,	*/	*	.R.STONE/LARC.	P *DMC-DD-00*
ARC		_	_	LO-100 ORBITER	_	SONIC STAF		* 0.01 *1.5 -		*LARC / *LARC -		.K.STUNE/LAKC. PENCER/NR	*JULY. 1
PWT			CONTROL C			CHARACTERIS	211+			*UNITARY PLAN			**************************************
95 04.4			ISTICS OF		*CS		*	*4.63		*IND TUNNEL		. SINGELLION	* •
Ο14 Δ4	•		/ CONCEP * SHUTTLE O*		+		*	.		* TIAD I GIAIAEF	Ť-1	DMO	•
			MACH 1.		*		*	*		* *	Ĩ		•
K-120,		TO 4.6			*		*	*		-	Ţ.		•
	*0	10 4.6	,		*		-			.	Ţ.		
ARC	_ 44	EDODVNA	ATO AND ES	DOUBLE DELTA WIN	* C+ ONC:	TUDINAL AL	* ND *E0000E	* 0.004	. /	*LARC /	- W	.C. WOODS, DAV	
2HT			ALIZATION			RAL-DIRECT		*20.3 ~	•	*LARC -		. STONE, JAMES	
201 05			ON A SPA			HARACTERIS		+20.5				. ARRINGTON /L	
A22			LE CONCEP			D CONTROL				*TUNNEL	*C		*
			DOUBLE D		-,	VENESS AS	-	*		* IONNEL		. E. VAUGHN	*
K" 120,			ORBITER			FLOW VIS		- -		•	-	. W. BROWN	•
			H NUMBER			ON STUDIE				•	_	DMS	*
		F 20.3	I NUMBER .		+12A1	ION STODIE	J ~	•		*	*	DING	*
		JF 20.3	,	•	·		*	*		*	<u>+</u>		*
RC	_ +1	WEDWAL I	POTECTIO	*THERMAL PROTECTI	ים מדיים	TATN AFDO	T DV81+UE A T T	DANC+4 A	,	*ARC /	 +T	. F. FOSTER, W	*DMC-DD-20
				N SYSTEM		HEATING R		*5.1 -		*ARC -		. GRIFALL/RI	*APRIL. 1
58			S OF THE			IN AND AR		*5.1				. K. LOCKMAN/A	
H2A			INTERNAT			APS AT THE		* 3.1		*SONIC WIND			*
H2B			AT PLATE		*TPS	al J Al THE	*	*		*NEL		. M. MOSER JR.	*
			NSFER MOD		*		*	*		*		DMS	*
104,	• * E		TOTER MOD		*		*	*		*	*	JJ	*
	*	:		• t	*		*	*		*	*		*
		1	:		•			•			4.5		
		ł					1	and the second					

				- 				WIND	TUNNEL T	EST /	DMS DATA	PROCES	SING						119
TEST		* * *	OODT	TITLE	*	CON	IGURATION	* S * *	TEST PURPOSE		TYPE OF		SCALE		ING	* *	COGNIZAN TEST DMS PERSONNEI	*PUB	BASIC LICATIONS COMMENTS
													·						
LARC		+ A E D O I		ATC AND		ADC I	0-400 000	IT+DEE:	INC THE C		DDGE		10 /	*1.450	,		WED D STOR	IE /NADMC	DD 0006
22HT				ALIZATI			_0-100 ORB		WING-FI		UKCE	* 20.3		*LARC *LARC			VID R. STO A LARC	•	UST. 1973
413				SSOCIA		. K			WING LEAD			*20.3					E. POUCHE		031, 1973
LA5	•			/ARIATI					SWEEP A			*		*TUNNEL				*	
CR-128.									HYPERSONI	-		*		* I CINNEL	-	*	1413	Ţ	
OK 120,				DRWARD				*EDS	III EKSONI	*		*		*		*		*	
				IRREC	•			*		*		*		*		*		*	
				ORM WIN				*		*		*		*		*		*	
				1 NUMBE				*		*		*		*		*		*	
		*OF 20	0.3		*			*		*		*		*		*		*	
		*			*			*		*		*		*		*		*	
LTV	- :	*RESUL	TS C	OF INVE	ST * 1	40A/I	ORBITER	*TO [DETERMINE	LONG*F	ORCE	* 0.01	5 /	*R.I.	/	*V.	ESPARZA	ROCK + DMS	-DR-2037
HSWT							ORBITER					*0.6		*LTV	•	*WE	LL INTERNAT	IONA*SEP	T., 1974
488							VERTICAL					*4.6		*HIGH S	SPEED WI	N+L		*	,
0A84		*ONFIC	SURAT	LION	*]	L		*TAB	LITY AND	*		*		*D TUNN	IEL.	*W.	R. EMBURY	ROCK*	
CR-134,	405	*SPACE	SHL	JTTLE V	/EH+1	40A/I	ORBITER	WI *CONT	ROL CHAR	ACTER*		*		*		*WE	LL INTERNAT	IONA*	
		*ICLE	ORB1	TER MC	DE*T	HOUT	VERTICAL	TA*IST	CS FOR TI	HE UP*		*		* ,		*L		*	
		L (49	9-0)	IN THE	[L]	L AN	WING	*-DA1	TED SSV C	ONFIG*		*		*		∗D.	A. SARVER	*	
		*TV 4	BY 4	-FOOT	*			*URA1	ION	*		*		*		*V.	W. SPARKS	*	
				D WIND) T*			*		*		*		*		* -D	MS	*	•
		*UNNEL	-		*			*		*		*		*		*		*	
	;	*			*			*		*		*		*		*		*	
NRLAD		_		OF LOW		IR ORI	BITER		STIGATE A		ORCE	* 0.04		*NR	•		MENNELL, E		
LSWT	_			TUNNE					AIC AND P			*0.12			-		RON/ROCKWEI	L IN*FEB	., 1974
701	•			.0405					I EFFECTS			*0.20					RNATIONAL	*	
DA 16				L ROCK					DUS AIR BI			*		*TUNNEL	-		E. VAUGHN	*	
CR-128,									ENGINE S'			*		*			R. ZILER	*	
				ESTED					N FORCED A			*		*		* -D	MS	*	
				E AIR					N THE PR			*		*	•	*		*	
				PRESEN				*E 01	THE GRO	UND *		*		*		*		*	
			GROL	JND PLA	N *			*		*		*		*		*		*	
	;	*E			*			*		*		*		*		*		*	

					WIND T	UNNEL TEST	/ DMS DATA	PROCESS	SING				120
TEST ID		REPORT		CONFIGURATIONS TESTED	* * *	TEST PURPOSE	*			* * TESTING * AGENCY	* * *	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
MSFC	- *	RESULTS O	F WIND T*N	MODEL 2A ORBITER	*DETER	MINE PROXIM	I*FORCE	*.004	/	*MSFC /	*W.	P. GARTON /RO	OC*DMS-DR-2039
14TWT				ND EXTERNAL TANK				*5.0		*MSFC -	*KWE		*MARCH, 1974
571	/*	CH 5 ON T	HE .004 *		*AEROD	YNAMIC FORC	*	*5.0		*14-INCH TRI			*
I A 6 A			EL 2A CO*			D MOMENTS E		*		*IC WIND TUN		T. KAVANAUGH	*
CR-134,			ON SPACE*			NCED BY VEH		*		*	* -DM	S	*
		-	O DETER *			A CONFIGURA		*		*	*		*
			IMITY EF*			HUTTLE ORBI		*		*	*		*
			ORBITER*			D EXTERNAL		*		*	*		*
			FFECTIVE*			URING AND A	B*	*		*	*		*
			NG ORBIT*		*ORT S	EPARATION	*	*		*	*		*
			AL TANK *		*		*	*	•	*	*		•
		ABURT SEP	ARATION *		*		*	*		*	•		
LARC	_ +	SHIDEACE D	OLICHNIESS*A	NAR 089-B-139 ORE	* CHDE	CE DOLICHNES	C*EUDUE	* 0.01	ΩΩ /	*LARC /	*G M	WARE R SE	PE *DMS-DR-2040
8TPT			N THE T *1			TS ON TRANS		* .35		*LARC -		R /LARC	*AUGUST, 1973
643			AERODYNA*			AERODYNAMIC		* 1.2		*8-FOOT TRAN			*
LA6	-		HE ROCKW*		*	ALKODINAMIO	*	*		*IC PRESSURE			*
			NATIONAL*		*		*	*		*NNEL	*-DN		*
OK IZO			ORBITER *		*		*	*		*	*		*
	*	0000 100	*		*		*	*		*	*		*
LARC	- *	TRANSONIC	AERODYN*I	ARC LO-100 ORBIT	T*TRANS	ONIC AERODY	N*FORCE	*0.010	1	*LARC /	*BER	NARD SPENCER	J*DMS~DR-2041
8TPT						CHARACTERIS		*0.35	- '	*LARC -	∗R.	/NASA LARC	*OCT., 1973
644			IATED WI*		*ICS	SSOCIATED W	I *	*1.2		*8-FOOT TRAN	ISON*D.	E. POUCHER	*
LA7A	*	TH VARIAT	IONS IN *		*TH V	RIATIONS IN	*	*		*IC PRESSURE	TU*-DM	IS	*
CR-128	781*	THE GEOME	TRY OF T*		*THE	SEOMETRY OF	T*	*		*NNEL	*		*
	*	HE FORWAR	*D PORTIO		*HE FO	RWARD PORTI	0*	*		*	*		*
	*	N OF IRRE	GULAR PL*		*N OF	IRREGULAR P	L*	*		*	*		*
	*	ANFORM WI	NGS *		*ANFO	RM WINGS	*	*		*	*		*
	*		*		*		*	*		*	*		*
MSFC				DRBITER ALONE		VISUALIZATI	O*FORCE	*0.004	•	*MSFC /		P. GARTON/RI	
14TWT				MFSC MODEL NO 45	3*N ST	JDIES .	*	*0.9	-	*MSFC -		E. VAUGHN	*MARCH, 1974
584			E NASA/M*		*		*	*5.0		*14-INCH TRI	-	15	*
IA52			14 INCH *		*		*	*		*IC WIND TUN	INEL*		*
CR-134			WIND TUN*		*		*	*		# 	*		#
			.004 SCA*		*		*	*		*	*		# ·
			(34-0) 5*		*			*		₹ .	*	1 1	.
			TLE ORBI* NTEGRATE*		.		. <u> </u>	.			* •		±
					1		•	# •		-	-		т ж
		D VEHICLE	. *		T		T	*		*	*		*
	•		•		T		-	•			•		•

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			#2110 TOTALLE TEST	/ UMS DATA	PROCESSING			121
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCALE *MACH RANGE	* TESTING * AGENCY	* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
:c -	- *HEAT TRANSFER DA1	T*RST_TILES.ORBITER	R∗HEAT TRANSFER D	AT*HEAT-TRANS	*1.00 /	*LARC /	*C. B. JOHNSON /LA	*DMS-DR-2043
	*A TO CAVITIES BET		*A FOR RSI TILES				•	*JUNE, 1973
	/+WEEN SIMULATED RS		*	*	*	*MACH 8 VARIABL		*
6	*I TILES AT MACH 8	3 <i>*</i>	*	*	*	*E-DENSITY HYPE		*
128,77	/O*	*	*	*	*	*RSONIC TUNNEL *	*	*
	* · *RESULTS OF INVEST	* [*SHITTLE ADRITED 1	* D*DETERMINE LONG!	TII*FODCE	* *.015 /		*MORRIS D. MILAM/R	*DMS-DR-2044
	· *IGATIONS ON A O.C		*DINAL AND LATER					*OCT 1973
	/*15-SCALE MODEL 24		*-DIRECTIONAL STA				*JACK A. MELLENTHI	
1A	*CONFIGURATION OF	*	*ILITY	* .	*	*SONIC WIND TUN	*N/NASA AMES	*
128,78	6+THE ROCKWELL INT		*ESTABLISH TRIM	CA*	*		*B. J. FRICKEN	*
	*ERNATIONAL SPACE		*PABILITY	*	*	*	*-DMS	*
	*SHUTTLE ORBITER I		*	*	*	*	*	*
	*N THE NASA/AMES F *ESEARCH CENTER 3.		*	*	*	*	* *	*
	*5 FOOT HYPERSONIC		*	*	*	*	*	*
	*WIND TUNNEL	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	* .
AD -	*RESULTS OF INVEST	T*ROCKWELL SSV ORBI	*OBTAIN SIX COMPO	ON+FORCE	*0.0405 /	*NR /	*D.G.WALSTAD /NR	*DMS~DR-2045
	* * IGATIONS (DA18) C		*ENT FORCE DATA		*0.16 -			*SEPT., 1973
	/*F A 0.0405 SCA_E		*D ELEVON HINGE	MO*		*LOW SPEED WIND	*-DMS	*
8 400 77	*MODEL OF THE 24		*MENT DATA	*	*	*TUNNEL	*	*
120,77	9*ND 3 SPACE SHUTTL E ORBITER CONFIGL		-	*	*	*	•	-
	*RATIONS IN THE NO		*	*	*	*	*	*
	*RTH AMERICAN AERO		*	*	*	*	*	*
	*NAUTICAL LABORATO		*	*	*	*	*	*
	RY LOW SPEED WIND)	*	*	*	*	*	*
	*TUNNEL AT $M = 0$.	*	*	* .	*	*	*	*
	*26 AND 0.16	*	*	*	*	*	*	*
	* · *AERODYNAMIC STAB]	* [#] ADC 0-400 DDD11	* **TDANCONIO AFDOD	* VN+F0DCE	* * 0.01 /	*/	* *BERNARD SPENCER.J	* +DMC-DD-1046
	* *LITY AND CONTROL		*AMIC PERFORMANCE			•	· · · · · · · - · · · · ·	*AUGUST. 1973
	/*CHARACTERISTICS C		*STABILITY AND CO	- •		*8-FOOT TRANSON		*
7	*F A LANGLEY CONCE		*TROL AND CONTROL			*IC PRESSURE TU		*
128,77	6*PT SPACE SHUTTLE	*	*EFFECTIVENESS	*	*	*NNEL	*	*
	*ORBITER (LO-100)		•	*	*	*	*	*
į	*AT MACH NUMBERS C	- (*	* * ·	*	*	*	*
	*F 0.35 TO 1.2	*	*	1 *	*	▼	*	*

				WIND T	UNNEL TEST	/ [DMS DATA	PROCES	SING						122
TEST ID	* * * * REPORT TIT		CONFIGURATIONS TESTED		TEST PURPOSE		TYPE OF TEST	*MODEL * * *MACH	SCALE			* *	COGNIZANT TEST DMS PERSONNEL	* BASI *PUBLICA *OR COM	ATIONS
LARC	- *EFFECT OF WAI	I TO+04	IOA SPACE SHIITTI	*10		*H	EAT-TRANS	* 006	,	*LAR	n /	*:1.	C. DUNAVANT/LA	A+DMS-DR-	-2047
	- *TOTAL TEMPERA			_		*		*10	•	*LAR	•	*RC		*FEB	
98	/*E RATIO VARIA			*		*		*10		*CON	TINUOUS-FLO	*		*	
LA31	*ON HEAT TRANS			*		*		*		*W H	YPERSONIC T	*		*	
CR-134.0	86*	*		*		*		*		*UNN!	EL	*		*	
	*	*		*		*		*		*		*		*	
ARC	- *WIND TUNNEL	TEST *2	CONFIGURATION	*TO OB	TAIN FORCE	A*F(DRCE	*0.019	/	*ARC			B. HARDIN, R.		
97SWT	- *OF THE 0.019	(2A *		*ND MO	MENT DATA,	W*PI	RESSURE	*1.55	-	*ARC	-	*R.	BURROWS /ROCK	∦*JULY,	1974
710	/*CONFIGURATION	*3U (V		*ING P	RESS. DIST.	, *		*2.0		*9-F0	OOT BY 7-FC	*ELL	<u>_</u>	*	
IA12B	*T PLUME SPACE	E SHU*		*ELEVO	N AND RUDDE	R*		*					R. GUIST /ARC	*	
CR-134,1	O4*TTLE INTEGRA	TED V*		*BENDI	NG MOMENTS	*		*		*WIN	D TUNNEL (L	J∗B.	J. FRICKEN	*	
	EHICLE IN TH	E ARC		*AND D	ETERMINE EF	F*		*		*NIT	ARY)	*-DN	MS SN	*	
	*9- BY 7-FOOT	UNI *		*ECT O	F SRM AND M	!P *		*		*		*		*	
	*TARY WIND TU	NNEL *		*S PLU	MES, SRM AN	ID*		*		*		*		*	
	*	*	•	*ORB.	NOZZLE GIME	*		*		*		*		*	
	*	*		*AL AN	GLES, AND S	R*		*		*		*		*	
	*	*		*M SHR	OUDS OFF	*		*		*		*		*	
	*	*		*		*		*		*	_	*		*	
	- *AERODYNAMIC	-	R 2A ORBITER		MINATION OF		ORCE	*.006	/	*LAR	-		GOROWITZ/ROCK		
	- *NG OF A SPAC				NG EFFECTS			*8.0		*LAR	_	*ELI	••	*JULY,	1973
	O/+TTLE DOUBLE				MINAR THROL			*			H 8 VARIABL			*	
0H40	*WING ORBITER				BULENT FLIC			*					T. KAVANAUGH	*	
CR-128,7	71*AT MACH NUMB	ER 8.*			IMES DURING	*		*		*R\$0	NIC TUNNEL	*-DI	MS	*	•
	*0	*		*REENT	RY.	*		*		*		*		*	
	*	*		*		*		*	. ,	*	,	*	B MT1 444 T	*	0050
	- *WIND TUNNEL						UKCE	*0.015	•				D. MILAM, T.		
	- *OF THE 0.15-	-	BITER		AL-DIRECTION			*0.6	-	*ARC			DZIUBALA /RI -		1973
706	/*ROCKWELL INT				IARACTERIST			*2.0					C. ENDICOTT /		
OA43	*TIONAL SPACE			-,	DDER AND EL			*		_			- T. MCGRATH	/ *	
CR-128,7	90*TLE VEHICLE			*VUN F	IINGE MOMENT	5*		*		*WIN	D TUNNEL	*ARI		*	
	*ER IN THE AM			*		*		*		# 			J. LANFRANCO W. BROWN	*	
	*BY 6-FOOT SU			*				* 		*		*5.		-	
_	*ONIC WIND TU	MINET *		# _		#		+		*		7 -UI	MO		
•	₹	*		*		₹ /		Ŧ		*		*		~	
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					1										
	r		i	1	{	1									

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					WIND TUNNEL	TEST /	DMS DATA	PROCESSING				123
	*		*		*	*		*MODEL	*	*	COGNIZANT	* BASIC
TEST ID	Г * *	REPORT TITLE	*	CONFIGURATIONS TESTED	* TES' * PURPO!		TYPE OF TEST	* SCALE *MACH RANGE	* TESTING * AGENCY		EST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
			54.54									. DMG DD 0054
MSFC 14TWT				DOSTER MSFC MODE				*0.00563 /		*J. D	. JOHNSON/MSF	
572		TERISTICS OF A 2-inch diamete			*ND MOMENT (*INPUT IN CO					-		*AUGUST, 1973
SA5F		DLID ROCKET BO			*INPUT IN CO *R PROGRAM T				*14-INCH TRISON *IC WIND TUNNEL			*
		ER (CONFIGURAT			*R PRUGRAM *RMINE THE			*			. POUCHER	*
JA 120,		S 89B AND 139)			*DECELERATION *			*		*-DMS		*
	*	C 000 AND 105)	*		*THE ATTITU			*	*	*		*
	*		*		*THE SRB'S			*	*	*		*
	*		*		*FREE-FALL	*		*	*	*		*
	*		*		*	*		*	*	*		*
LARC	- *SI	UPERSONIC AERO	DY*L	0-100 ORB(SHIPS)	*EFFECTS OF	GEOMET*	FORCE	*0.01875 /	*LARC /	*D. R	. STONE, B. S	*DMS-DR-2052
JPWT	- *N	AMIC CHARACTER	IS*(E	BW2VFB)	*RY ON SUPER			* 2.36-	*LARC -			*NOV., 1973
1015		ICS ASSOCIATED			*AERODYNAMI	CHARA*		* 4.63	*UNITARY PLAN W	/*V. W	. SPARKS	*
LA 10	* I '	TH VARIATIONS	IN*		*CTERISTICS	ON PLA*		*	*IND TUNNEL	*B. W	. MYERS	*
CR-128,	,791+TI	HE GEOMETRY OF	T*		*NFORM WINGS	\$ *		*	*	*-DMS		*
		E FORWARD PORT			*	*		*	*	*		*
		OF IRREGULAR	PL*		*	*		*	*	*		*
	* A1	NFORM WINGS	*		*	*		*	*	*		*
	*		*		* <u> </u>	*		*	*	*		*
NRLAD		XPERIMENTAL IN			*INVESTIGATE			* 0.0405 /			. CAMERON AND	
LSWT		TIGATIONS OF A			*ONGITUDINAL						. RITSCHEL /	
705		.0405 SCALE SP	'AC*		*ATERAL-DIR				*LOW SPEED WIND			*DEC., 1973
DA21B		SHUTTLE ONFIGURATION 3	· O.+		*L SUBSONIC			*		*TION		∓
JK-120,		BITER TO DETER			*NAMIC CHARA *TICS OF THE			*			. SARVER . MYERS	-
		E SUBSONIC STA			*IICS OF THE *ELL INTERNA			*	*	*-DMS		- -
		ITY	*		*PROPOSED P			*	*	* PW2		- *
		HARACTERISTICS	(*		*SPACE SHUTT			*	*	*		*
		A21)	*		*ITER	*		*	*	*		*
	*	- •	*		*	*		*	*	*		*
NRLAD	- *E	XPERIMENTAL IN	VE * OF	RBITER 3	*INVESTIGATE	THE L+	FORCE	* 0.0405 /	*NR /	*B. W	. CAMERON AND	*DMS-DR-2053
.SWT		TIGATIONS OF A			ONGITUDINAL		-				. RITSCHEL /	
705	/*0	.0405 SCALE SP	AC*		*ATERAL-DIRE				*LOW SPEED WIND			
DA21B	*E	SHUTTLE	*		*L SUBSONIC					*TION		*
CR-128,	792*C	ONFIGURATION 3	0*	:	NAMIC CHARA	ACTERIS*		*	*	*D. A	. SARVER	*
		BITER TO DETER			*TICS OF THE	ROCKW*		*	*	*B. W	. MYERS	*
		E SUBSONIC STA	8 I *		*ELL INTERNA			*	*	*-DM\$		*
		ITY :	. *		*PROPOSED PR		14	* 1	*	*		*
		HARACTERISTICS	(*		SPACE SHUTT	LE ORB*		*	*	*		*
	*0/	A21)	*	;	*ITER	*		*	*	*		*
	*		*	:	*	*		*	*	*		*

			WIND TUNNEL TI	EST / DMS DAT	A PROCESSING			124
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST		* CONFIGURATIO		* TYPE O		E* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	E* AGENCY	* PERSONNEL	*OR COMMENTS
1.45.0	ACURE AGE DOVING			TUE . 50005				
LARC	- *SURFACE ROUGHN		*TO DETERMINE *EFFECTS OF SI		* 0.188 / *1.6 -	*LARC / *LARC -	*G.M. WARE , BER *RD SPENCER JR.	
	34/*PERSONIC AERODY		*E ROUGHNESS		*4.63	*UNITARY PLAN		*
LASA	*MICS OF THE RO		*E ORBITER AE		*4.05	*IND TUNNEL	*J. E. VAUGHN	*
LA8B	*WELL INTERNATION		*AMIC CHARACT		*	*	*B. W. MYERS	*
	796*L 089B-139 ORB		*ICS OVER COM		*	*	*-DMS	*
	*R	*	*MACH RANGE	*	*	*	*	*
	*	*	*	*	*	*	*	*
MSFC	- *STATIC STABILIT	TY *ORBITER 139	*TO DETERMINE	THE *FORCE	*0.004 /	*MSFC /	*E.C. ALLEN/ROCK	(WE *DMS -DR - 2055
14TWT	- *AND CONTROL EF		*STATIC STABI		* .6 -	*MSFC -	*LL	
574	/*TIVENESS OF MOD	DEL*	*AND CONTROL	EFFEC*	* 4.96	*14-INCH TRISC	N*TERRY TUTTLE/RO	OCK*SEPT., 1973
0A48	*\$ 12-0 AND 34-0) *	*TIVENESS OF	MODEL*	*	*IC WIND TUNNE	L*WELL	*
CR-128,	780*OF THE VEHICLE	3 *	*12-0 AND 34-	0 *	*	*	*V. W. SPARKS	*
	*CONFIGURATIONS	*	*	*	*	*	*B. J. FRICKEN	*
	*	*	*	*	*	*	*-DMS	*
	*	*	*	*	*	. *	*	*
MSFC	- *STATIC STABILI		*TO DETERMINE			*MSFC /	*E.C. ALLEN/ROCH	
14TWT	- *AND CONTROL EF		*STATIC STABI		* 6 -	*MSFC -	*LL	
574	/*TIVENESS OF MOI		*AND CONTROL		* 4.96		ON*TERRY TUTTLE/RO	DCK*SEPT., 1973
OA48	*\$ 12-0 AND 34-0		*TIVENESS OF		*	*IC WIND TUNN		*
CR-128,	780*OF THE VEHICLE		*12-0 AND 34-	0 *	*	*	*V. W. SPARKS *B. J. FRICKEN	*
	*CONFIGURATIONS	* *	# 	*	# 		*-DMS	* *
	*	*	.	*	*	*	* ~ DMS	*
MSFC	- *STATIC STABILI	TV +0001TED 430	*TO DETERMINE	THE *EUDCE	*0.004 /	' *MSFC /	*E.C. ALLEN/ROC	
14TWT	- *AND CONTROL EF		*STATIC STABI		* .6 -	*MSFC -	*LL	
574	/*TIVENESS OF MO		*AND CONTROL		* 4.96		ON*TERRY TUTTLE/R	TOLUME OU
0A48	*S 12-0 AND 34-		*TIVENESS OF		* 4.50	*IC WIND TUNN	•	*
	780+OF THE VEHICLE		*12-0 AND 34-		*	*	*V. W. SPARKS	*
,,	*CONFIGURATIONS		*	*	*	*	*B. J. FRICKEN	*
	*	*	*	*	*	*	*-DMS	*
	*	*	*	*	*	*	*	*
LARC	- *SURFACÉ ROUGHN		NOSE*SURFACE ROUG	HNESS*FORCE	*0.01875 /	/ *LARC /	*G. M. WARE AND	BE*DMS-DR-2056
LTPT	- *EFFECTS ON THE	S *+ OMS	*EFFECTS ON T	RANS *	*	*LARC -	*RNARD SPENCER,	JR*NOV., 1973
130/135	/*UBSONIC AERODY	NAM*NAR O89B-MOD I	NOSE*ONIC AERODYN	AMICS*	*	*LOW-TURBULEN		: *
LA9	*ICS OF THE	*	*	*	*		N *M. D. MILAM/RO	
CR-128,	782*ROCKWELL INTER		*	•	*	*EL	*ELL INTERNATION	NAL*
	IONAL 089B-139	OR	*	*	*	*	*J. E. VAUGHN	*
	*BITER	*	*	*	*	*	*B. W. MYERS	*
	*.	*	*	*	*	*	*-DMS	*
	*	*	*	*	*	*	*	*

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	*		*			*		*		*MODEL		*		*	COGNIZANT	* BA	SIC
TEST	*		*	CONF	IGURATIONS	*	TEST	*	TYPE OF			· • TES	STING	*	TEST DMS		CATION
ID	*	REPORT	TITLE +		TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	E* AGE	NCY	· *	PERSONNEL	*OR CO	MMENTS
	-,							· ·									
ARC	- *	RESULTS (OF AN EXP*	ORBITE	R. MODIFIED)*STAE	3.AND CONTRO)L *F(DRCE	* O.	015/	*LARC	1	*V.	ESPARZA.M.	MIL*DMS-D	R-2057
JPWT			_ AERODYN*		•	_	RS. OF CONFI			* 2.5	•	*LARC	•		/ROCKWELL	-	197
035	/*/	AMIC INVI	ESTIGATIO*	•		*2A.	3 AND ALT. F	OR+		* 4.6	i	*UNITA	RY PLAN		SINGELLTON		
)A44	*	N TO OBTA	AIN STATI+			*EBO	ΣY	*		*		*IND T	TUNNEL	*-D	MS	*	
R-134,4	411+0	C STABIL	TTY AND C+			*		*		*		*		*	-	*	
-	*(ONTROL CH	HARACTERI*			*		*		*		*		*		*	
	*	STICS OF	THE SSV *			*		*		*		*		*		*	
	*(CONF I GURA	ATIONS 2A+			*		*		*		*		*		*	
	*	(VL70-000	0089B) MO*			*		*		*		*		*		*	
	*1	DEL 1 AND	3 (VL70+			*		*		*		*		*		*	
	*	-000139B	MODEL 2*			*		*		*		*		*		*	
	*(DRBITERS	AT MACH *			*		*		*		*		*		*	
	*	NUMBERS (OF 2.5. 3*			*		*		*		*		*		*	
	*	.9, AND	1.6 IN TH*			*		*	•	*		*		*		*	
	*	E NASA LA	ARC 4X4-F*			*		*		*		*		*		*	
	*(TWYU TOO	(OA44) +			*		*		*		*		*		*	
	*		*			*		*		*		*		*		*	
.ARC	- *[RESULTS (F THE O. *	ORBITE	R NAR VL70-	*0BT/	IN GENERAL	ST*F0	DRCE	* 0.01	5 /	*LARC	/	*BE	RNARD SPENCE	ER J*DMS-D	R-2058
.TPT	- *(015 SCALI	SPACE S*	000134	B CONFIG.	*ABII	ITY AND CON	ITR*		*0.25	-	*LARC	-	∗R.	AND JAMES I	ELLI*MARCH	1. 197
38	/*I	HUTTLE VI	HICLE OR*			*OL (CHARACTERIST	IC*		*		*LOW-T	URBULEN	CE * SO	N /NASA LARG	* 2	-
A 17	*	SITER TES	ST (0A17)+			*S		*		*		*PRESS	URE TUN	N +D.	E. POUCHER	*	
R-134,0	79*	IN THE NA	ASA LOW T+			*		*		*		*EL		* - DI	MS	*	
	(JRBULENCI	PRESSUR			*		*		*		*		*		*	
	*!	E TUNNEL	*			*		*		*		*		*		*	
	*		*			*		*		*		*		*		*	
RC	- *	INVESTIGA	TIONS OF*	ORBITE	R 2A	*DETE	RMINE THE F	OR*F	DRCE	*0.015	/	*ARC	/	*M.	D. MILAM AN	ND M*DMS-D	R-2059
.5HWT	- *	THE SPACE	SHUTTL *			*CE.	MOMENT, AND) H*		*5.0	-	*ARC	-		E. NICHOLS/F		
60	/+1	E ORBITER	2A CONF+			*ING	MOMENT CHA	RA*		*7.0		*3.5-F	OOT HYP	ER*WE	LL INTERNAT	IONA*	
A 1 1B	*	IGURATION	۰ *			*CTEF	RISTICS	*		*		*SONIC	WIND T	UN*L		*	
R-128,	798+0	0.015-SC	LE MODEL+			*0F (CONFIGURATIO	N *		*		*NEL		*J.	A. MELLENTH	IN *	
	*	IN THE NA	ASA AMES *			*2A S	SPACE SHUTTL	.E *		*		*		*ANI	D J. CLEARY	/NAS*	
	*!	RESEARCH	CENTER *			*VEH	CLE ORBITER	. A*		*		*		*A/	AMES RESEARC	CH C*	
	*:	3.5-F00T	*			*T M/	VCH	*		*		*		*EN	TER	*	
	1	HYPERSON	C WIND T			*NUME	BERS 5, 7, A	* GN		* .		*		*B.	W. MYERS	*	
	(JNNEL AT	MACH NUM			*10		*		*		*		*-D!	MS	*	
	*[BERS 5, 7	7 AND 10 *			*		*		*		*		*		*	
	*	- '	*		2	*		*		* .		*		*		*	
						1		1					1				

ARC - * 3.5HWT - *	REPORT TITLE	* * CONFIGURATION * TESTED		TEST	*		*MODEL		*	*	COGNIZANT	* BASIC
ID * ARC - * 3.5HWT - *				TEST								
ARC - * 3.5HWT - *		* TESTED	*		-	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATIO
3.5HWT ~ * !63 /*	DESIGNE OF AN AS			PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENT
3.5HWT ~ * !63 /*	DECLIETE OF AM AC											
63 /*		R*ORBITER 3,A		AL STABIL		RCE	*0.015	•	*ARC /		J. DZIUBALA/R	
	DDYNAMIC FORCE A			ONTROL CH			*5.3		*ARC -		W. CLEARY/NAS	A∗JUNE, 19
1A58 *	D MOMENT INVESTI			ISTICS FO			*10.3		*3.5-FOOT HYPE			*
	1C.O NA 30 NOITA			URATION 3			*		*SONIC WIND TU			*
	-SCALE CONFIGURA	•		LTERNATE '	VEH*		*		*NEL	*-DN	AS .	*
	ION 3 SPACE SHUT		*ICLES		*		*		*	*		*
	LE ORBITER IN TH		* .		*		*		*	*		*
	NASA/ARC 3.5-FOO		*		*		*		*	*		*
	T HYPERSONIC WIN	D*	*		*		*		*	*		*
*	TUNNEL (OA58)	*	*		*		*		*	*		*
*		*	*		*		*		*	*_	/-	*
		N*VL70-000139B (N				RCE	*0.015	•	*NR /		C. MENNELL /R	
	IC, AND SUPERSON			CHARACTER	IST*		*.6		*NRLAD -		A. SARVER	*DEC., 19
•		C*VL70~000147B (N	MOD*ICS		*		*3.0		*7-FOOT TRISON		45	*
	ONTROL CHARACTER		*		*		*		*C WIND TUNNEL	*		*
-	ISTICS OF THE -1		*		*		*		*	*		*
	7B SPACE SHUTTLE	*	*		*		*		*	*		*
*	ORBITER	*	*		*		*		*	*		*
*		*	*		*		*		*	*		*
	_	L*INTEGRATED VEHI					*0.01	•			CK CAMPBELL/RI	
		O*E CONFIG 3 (MOD					*4.5		*AEDC -		E. VAUGHN	*VOLUME 01
	N EFFECTS TEST C			OM ORB. U			*		*SUPERSONIC WI			*AUGUST, 19
	NDUCTED IN THE			PTIVE TRA	JEC*		*		*D TUNNEL (A)	*-DI	MS	*
	AEDC 40X 40 INCH		*TORY	SYSTEM	*		*		*	*		*
	TUNNEL A FACILIT	•	*		*		*		*	*		*
	ON THE ROCKWELL	*	*		*		*		*	*		*
	INTERNATIONAL	*	*		*		*		*	*		*
	LAUNCH CONFIGURA		*		*		*		*	*		*
	ION 3 INTEGRATED	*	*		*		*		*	*		*
*	VEHICLE	*	*		*		*		*	*		*
*		*	*		*		*		*	*		*

TEST														
				WIND TUN	NEL TEST	 / [OMS DATA	PROCESSIN	 NG					 127
	*	*		*		*		*MODEL	*		*	COGNIZANT	* BASIC	-
	* REPORT T	* ITLE *	CONFIGURATIONS TESTED		TEST RPOSE	*	TYPE OF TEST	* SCA *MACH RAN	ALE*			EST DMS PERSONNEL	*PUBLICATION*OR COMMEN	
									, .	500,415 /				
			INTEGRATED VEHICL E CONFIG. 3 (MODE				JRCE	*0.01 *4.5 -	•	ROCKWELL/ AEDC -		CAMPBELL/RI	*UM5-DR-200 *VOLUME 02	
	*N EFFECTS				ORB. USI			*		SUPERSONIC WI				
	*NDUCTED IN				IVE TRAJE			*		D TUNNEL (A)			*	,, ,
	*DC 40 X 40			*TORY SY		*		*	*	D TORREL (A)	* 5143		*	
	*UNNEL A FA			*	312111	*		*	*		*		*	
	*ON THE ROC			*		*		*	*		*		*	
	*NTERNATION			*		*		*	*		*		*	
	*CH CONFIGU			*		*		*	*		*		*	
	*3 INTEGRAT			*		*		*	*		*		*	
	*CLE	*		*		*		*	*		*		*	
	*	*		*		*		*	*		*		*	
oc -	*AFRODYNAMI	C RESUL*1	NTEGRATED VEHICL	*SFPARAT	TON TEST (O+FC	DRCE	*0.01	/ *	ROCKWELL/	*JACK	CAMPBELL/RI	*DMS-DR-206	62
-			CONFIG. 3 (MODE				3.1.0.0	*4.5 -		AEDC -		. VAUGHN	*VOLUME 03	
	*N EFFECTS				ORB. USI			*		SUPERSONIC WI			*AUGUST. 19	
-	*NDUCTED IN				IVE TRAJE			*		D TUNNEL (A)			*	
_	*DC 40 X 40			*	TIE TRACE	*		*	*	D (0)	*		*	
	*UNNEL A FA			*		*		*	*		*		*	
	*ON THE ROC			*		*		*	*		*		*	
	*NTERNATION			*		*		*	*		*		*	
	*CH CONFIGU	. – .		*		*		*	*		*		*	
	*3 INTEGRAT			*		*		*	*		*		*	
	*CLE	*		*		*		*	*		*		*	
	*	*		*		*		*	*		*		*	
c -	*RESILITS DE	TESTS *1	NTEGRATED VEHICL	*STATIC	STARTI TTY	*FC	DRCE	*0.004	/ *	MSFC /	*F. C	. ALLEN, T.	+DMS-DR-206	63
	*IN THE MSF	-			RENCE EFF	•		*0.6 -		MSFC -		TON /ROCKWEL		973
	*INCH TRISO			*ECTS		*		*4.96		14-INCH TRISC		•	*	
	*ND TUNNEL			*		*		*		IC WIND TUNNE			*	
	*004 SCALE			*		*		*	*		*-DMS		*	
-	*F THE ROCK			*		*		*	*		*		*	
	*TERNATIONA			*		*		*	*		*		*	
	*SHUTTLE VE			*		*		*	*		*		*	
	*3. (INTEGR		•	*		*		*	*		*		*	
	*NFIGURATIO			*		*		*	*		*		*	
	*	*		*		*		*	*		*		*	
		·										, I		
											:			

	WIND TUNNEL TEST / DMS DATA	PROCESSING	128
TEST * * CONFIGURATIONS ID * REPORT TITLE * TESTED	* * TEST * TYPE OF * PURPOSE * TEST	*MODEL * * COGNIZA * SCALE* TESTING * TEST DMS *MACH RANGE* AGENCY * PERSONN	*PUBLICATIONS
CALSPAN - *WIND TUNNEL TEST *INTEGRATED SSV 28 BTWT - *OF THE O.019 SCAL*,3A MODIFIED T14-053 /*E SPACE SHUTTLE I* IA36 *NTEGRATED VEHICLE* CR-141,814*(MODEL 14-OTS) IN*	*RE LOADS, WING, E*FORCE *LEVON, AND RUDDER* *HINGE MOMENTS, * *WING PRESSURE DIS* *TRIBUTIONS, AEROD* *YNAMIC STABILITY * *AND CONTROL * *A*MPS NOZZLE PRESSU*PRESSURE *RE LOADS, WING, E*FORCE *LEVON, AND RUDDER* *HINGE MOMENTS, * *WING PRESSURE DIS* *TRIBUTIONS, AEROD* *YNAMIC STABILITY * *AND CONTROL * * *AND CONTROL * * * *DETERMINE EFFECTS*FORCE *OF COLD JET GAS *PRESSURE *PLUMES ON LONG. A*	*0.9 - *NR	R * RLE * * N, R. *DMS-DR-2064 /ROCKW*VOLUME 02 STRUZ*DEC., 1975 PAN * R * RLE * N, R. *DMS-DR-2065 /ROCKW*VOLUME 01 ITIONAL*APRIL, 1975
IA12C *NTEGRATED VEHICLE* CR-141,518*IN THE NASA AMES *	*ND LAT-DIR. CHAR.* *,EXPOSED WING HIN* *GE MOM., WING PRE* *SS. DIST., ORBITE* *ESS. DIST., AND M* *ODEL BASE PRESSUR* *ES * * *DETERMINE EFFECTS*FORCE *OF COLD JET GAS *PRESSURE *PLUMES ON LONG. A* *ND LAT-DIR. CHAR.* *,EXPOSED WING HIN* *GE MOM., WING PRE* *SS. DIST.,ORBITER* *MPS EXTERNAL PRE: * *SS. DIST.,AND MOD* *EL BASE PRESSURES* *	* **OT SUPERSONIC *L. R. GUIST * **WIND TUNNEL (U*AMES * **NITARY) *B. J. FRICK * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * *

	*		,	*	*		*		*MODE!		*		*	COGNIZANT	* 5	BASIC
TEST	*		,	CONFIGURATIONS	*	TEST	*	TYPE OF			* TEST	ING	*	TEST DMS		ICATIONS
ID	*	REPORT TI	TLE ,	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENO	CY	*	PERSONNEL	*OR (COMMENTS
C				2A CONFIGURATION					*0.019		*ARC			. HARDIN, R.	R. *DMS-	DR-2065
SWT				•				PRESSURE			*ARC			ROWS/RI		IME O3
0	/ * E	SPACE SHU	ITTLE I	*		MES ON LONG.			*3.50					.GUIST/NASA	AM*APR1	L. 1975
112C	*1	NTEGRATED V	EHICLE,	*		_AT-DIR. CHA			*		*OT SUPE				*	
?-141,5		IN THE NASA				POSED WING H			*					J. FRICKEN	*	
		3 X 7-FOOT				MOM., WING P			*		*NITARY))	*-DM	S	*	
		RY WIND TUN	INEL (IA:	k		DIST., ORBIT			*		*		*		*	
	* 1	12C)	,	k		EXTERNAL PR	_		*		*		*		*	
	*		,	•		DIST., AND M			*		*		*		*	
	*		,	•		BASE PRESSUR	ES*		*		*	•	*		*	
	*			,	*		*		*		*		*		*	
\RC				SPACE SHUTTLE OR				ORCE	*0.00					.POWELL/NASA		
HT				ITER 089B-139					*10.3		*LARC					, 1973
3		AND CONTROL				HARACTERISTI			*					.BLACKSTOCK/	NA *	
111		CTERISTICS	-			SHUTTLE ORBI	T *		*		*W HYPER				*	
₹-128,		0075 SCALE			*ER		*		*		*UNNEL			E. VAUGHN	*	
		ROCKWELL IN			*		*		*		*			J. FRICKEN	*	
		IONAL 089-1			*		*		*		*		*-DM	S	*	
		TER CONFIG	SURATIO	•	*		*		*		*		*		*	
	*1		,	•	*		*		*		*		*		*	
	*		, ,	,	*		*		*		*		*		*	
RC				O.025 SCALE MODE	-	_		STRUCT-DYN				•		w. FOUST/ROC		
TBT		•		OF SPACE SHUTTLE					*0.6		*LARC		*ELL			IST, 1973
14				ORBITER (24-0) F					*1.3					T. KAVANAUGH	*	
2		ER MODEL 24	,-0	*IN/RUDDER		E TRANSONIC			*		*NIC BLC	T NWOOWC	* - DM	S	*	
1-128,7	77*		1	•		SHT REGION T			*		*UNNEL		*		*	
	*		,	k		ORT ANALYTI	_		*		*		*		*	
	*		,			UTTER PREDI	CT*		*		*		*		*	
	*		,	K	*IONS	j.	*		*		*		*		*	
	*		T		*		*		*	,	*	,	*		*	DD 0000
				-89B(2A) ORBITER				ORCE	*0.040					MENNELL /ROC		
WT		BREATHING				NE NACELLE			*0.20		*NRLAD		*ELL		*DEC.	, 1973
8		SION SYSTE				ING AND LOCA	11*		*					A. SARVER	*	
71A		PACE SHUTTL	_		*ON		*		∓		*TUNNEL			M. HALE	*	
r-128,7		TER SUBSONI			*		*		*		*		*-DM	> .	*	
		LITY AND C			∓		*		*		*	,	*	1	*	
		CHARACTERIS	11702		*		*		*		*		*		*	
	*((OA71A)			*		*		*		∓	1	*		*	
	*			r .	*	: '	*		* .		*	4000	*		*	

					WIND T	UNNEL TEST	/ DM	DATA	PROCES	SING						13
	*	,	*		*		*		*MODEL		*		*	COGNIZANT	*	BASIC
TEST		1	*	CONFIGURATIONS		TEST	* T	PE OF	*	SCALE	* TESTIN	√G	*	TEST DMS		BLICATION
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	* 7	EST	*MACH	RANGE	* AGENCY	, 	* 	PERSONNEL	*OR	COMMENTS
LARC		EFFECTS OF REACT		DD 0001770	+ 111755	FEDENCE CTU	D+E0D		*0.015	,	*LARC	,		DALLECH / DOCL	/UE+014	c-DD-2050
UPWT		ON CONTROL SYSTE		KK UKBITEK		FERENCE STU SUPERSONIC		, C	*0.015	•	*LARC			R.RAUSCH/ROCK		N., 197
1031		JET-FLOW FIELD			*PEEDS		*		*4.0					J.MONTA/LARC	*	,
MA7	•	NTERACTIONS ON	-			TERMINE CON	IT*		*		*IND TUNN			E. VAUGHN	*	
CR-134.	074+	A 0.015 SCALE MO)D*		*ROL A	MPLIFICATIO	N*		*		*		*A.	T. KAVANAUGI	+ +	
	*	EL SPACE SHUTTLE	*		*FACTO	RS RESULTIN	*		*		*		*-DN	4S	*	
	*	ORBITER AERODYNA	\M*		*G FRO	M JET INTER	-*		*		*		*		*	
	*	·IC	*		*ACTIO	N BETWEEN T	'H*		*		*		*		*	
	*	CHARACTERISTICS	*		*E RCS	PLUMES AND	*		*		*		*		*	
	*	•	*			XTERNAL FLO			*		*		*		*	
	*		*		*OVER	THE VEHICLE	*		*		*		*		*	
	*	· 	*		*		*	_	*		*	,	* .		*	
LARC		EFFECT OF GASEOU						CE	*.019	•	*LARC			B. DODS, JR.		
LTPT		AND SOLID SIMUL							*1.6		*LARC			J. BROWNSON,		T., 191
141		ATED JET PLUMES	_	M		SEPARATION			*2.2					KASSNER / AF		
LA23		N AN 040A SPACE HUTTLE LAUNCH (_	PIRATION EF			*				*K.	L. BLACKWELI	- /*	
CR-128,		NFIGURATION AT	-			DUE TO OPER			*		*EL			W. SPARKS	.	
		CH NUMBERS FROM				OF BOTH THE			*		*			T. KAVANAUGI		
		.6 TO 2.2	1 7			ROCKET MOTO	-		-		*		*-DI		¹ ÷	
	*	.0 10 2.2	*		*S	RUCKET MUTU	*		*		*		*	73	*	
	*	•	*		*		*		*		*		*		*	
ARC	- +	RESULTS OF TESTS	: *N	IDDE1 32-0	*ORTAT	N STABILITY	* FOR	`F	*0.015	i	*ARC	/	*T.	J. DZIUBALA	. M*DN	S-DR-207
		OF 0.010- AND 0	-			ONTROL CHAR		<i>-</i>	*0.010	•				D. MILAM/ROCI		
168		15-SCALE MODELS		, , , , , , , , , , , , , , , , , , ,		STICS FOR T			*5.3					INTERNATION		,
DA23		F SPACE SHUTTLE	_			BASELINE	*		*10.3					W. CLEARY. J		
CR-128.	799*	RBITER CONFIGURA	\T *		*VEHIC	LE CONFIGUR	? A*		*		*NEL		*. !	MELLENTHIN/NA	ASA*	
	*	I AE DNA E 2ND!	* V		*TION		*		*		*		*AM	ES	*	
	*	THE AMES RESEARC	CH*		*		*		*		*		*B.	W. MYERS	*	
	*	CENTER 3.5-FOOT	*		*		*		*		*		*-DI	MS	*	
	*	HYPERSONIC WIND	T *		*		*		*		*		*		*	
	*	UNNEL (OA23)	*		*		*		*		*		*		*	
	*	•	*		*		*		*		*		*		*	
MSFC 14TWT		*MISALIGNMENT STO *IES ON SPACE SHO						CE	* 0.00 *0.9		*MSFC *MSFC			RAMSEY /MSF		
573		TLE INTEGRATED							*1.46		*14-INCH				*	, 13
IA31FC	- 1	HICLE		ODEL ELEMENTS	*TS	,	*		*					W. SPARKS	*	
CR-134.			*		*	4 1	*	1	*	1	*			T. KAVANAUGI	H *	
	*	•	*		*		*	1 "	*		*	1	*-DI		*	
														-		

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						WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING								13
	*			*		*		*		*MODEL		*			*	COGNIZANT	*	BASI	 С
TEST	*	i		* C	DNFIGURATIONS	*	TEST	*	TYPE OF				ESTING	i	*	TEST DMS		JBLICA	
ID	*	REPORT TIT	LE :	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	E* A(GENCY		*	PERSONNEL	*O*	R COMM	ENTS
ARC							AIN THE DETAI	-	ORCE	*0.015	<i>'</i>	*LAR			_	J. DAILEDA,		-	
IPWT							EFFECTS THAT			*		*LAR				MARROQUIN	*M/	ARCH,	197
043	•					_	JET FLOW INTE			*					_	E. VAUGHN	*		
0A70		N THE STABIL:					IONS HAVE ON			*		*IND	TUNNE	L	*A.	T. KAVANAUGH	1 *		
R-134,		CTERISTICS OF					RSONIC STABIL			*		*			*-Di	MS	*		
		.015 SCALE SI	_				AND CONTROL C			-		-			-		-		
		SHUTTLE MODE					SPACE SHUTTL			-		-			-				
		TESTED IN THE					ICLE			Ţ		-			-		*		
		GLEY RESEARCH				* * *	IICLE	-				*					*		
		TER UNITARY				*		*		*		*			*		*		
		WIND TUNNEL	r L AUN	*		*		*		*		*			*		*		
	*					*		*		*		*			*		*		
IRLAD	- *	FFFECTS OF TH	HF AT	∗ ~ 891	R SPACE SHUTTI	* TNV	ESTIGATE THE	_ ∩*₽	RESSURE	*0.040	5 /	*NR	/		*RRI	UCE W. CAMERO	N +DA	IS-DR-	2074
.SWT							TER WING PRES			*0.165		*NRL	۸D -			. /RI			197
709		E PLUMES ON					DISTRIBUTION	-	ONOL	*	•			WIN		B. LOWE	*		
)A57A		RBITER SUBSON			2011412011		ULTING FROM F			*		*TUN			*-DI		*		
		ING PRESSURE					UNDER-WING EN			*		*			*		*		
,		RIBUTIONS	,	*			NACELLE PLUM			*		*			*		*		
	*			*		*S		*		*		*			*		*		
	*			*		*		*		*		*			*		*		
ARC.	- *	INVESTIGATION	V OF	*MODI	EL SS-H-00326	*AER	ODYNAMIC HEAT	I *H	EAT-TRANS	*0.005	93 /	*LAR	c /		*H.	GOROWITZ/RI	*DN	1S-DR-	2075
VDHT	- *	CONFIGURATION	N EFF	+ 1		*NG	INVESTIGATION	S*		*7.9	-	*LAR	c -		*A.	T. KAVANAUGH	1 *OC	ЭТ.,	197
778/	/*	ECTS ON ENTRY	Y HEA	*		*		*		*7.9		*MACH	4 8 F	RIABI	_ * - DI	MS	*		
855	/*	TING DISTRIBL	JT I DN:	*		*		*		*		*E-DI	ENSITY	HYPI	*		*		
H41	*	S AT MACH = 8	B.O (*		*		*		*		*RSO	VIC TU	NNEL	*		*		
R-128,	784*	OH41)		*		*		*		*		*			*		*		
	*		,	*		*		*		*		*			*		*		
ARC					1-00326-4		ODYNAMIC HEAT		EAT-TRANS							GOROWITZ/RI		IS-DR-	
VDHT					1-00326B-5,-6,	*NG	INVESTIGATION	S*		*0.006						WHITE, A. D'	ER+OC	ΣT.,	197
060/		ECTS ON ENTRY				*		*		*7.9	-					CO/GRUMMAN			
079		TING DISTRIBL			1 10D	*		*		*7.9						T. KAVANAUGH	1 *		
H41A		S AT MACH NO	= 8.	*		*		*		*		*RSO	VIC TU	NNEL	* ~ DI	MS	*		
R-128,	785*	O (OH41A)	,	*		*		*		*		*			*		*		
	*		,	*		*		*		*		*			*		*	•	
i		1 .				1	1 1									the second of			
		\$ 1.00 miles			The second second				1				1	;					
						1		1 1	1000	1. 1.			- F	1					
						!	i '												
					•														

					- -			WIND	FUNNEL TES	т /	DMS D	ATA	PROCES	SING							132
		*			*		,	*			*		*MODEL		*		*	COGN	NI ZANT	* BA	SIC
TEST		*			*	CONFIGUR			TEST		* TYPE					STING			DMS		CATIONS
ID		* REP	ORT	TITLE	*	TEST	ED ,	*	PURPOSE		* TES	T	*MACH	RANGE	* AG	SENCY	*	PERS	SONNEL	*OR CO	MMENTS
								- ·	·		_										
ARC									ETERMINE L			IRE			*ARC	/				D.*DMS-D	
66SWT						4 ET, 2 SF			ESSURE DIS				*0.6	-	*ARC	-		_	,	CK*VOLUM	
630									ONS ON THE				*2.0			OT BY 6-F		ELL IN	TERNATIO	INA*MAY,	1974
IA29						_			R FUSELAGE				*			SUPERSONIC				*	
OA63						L 36-OTS			CENT FLIGH				*		*WINE	TUNNEL			IST, ÇAR	!L *	
CR-134,									PPORT VEHI				*		*				ON, ARC	*	
				ARC 6-			:	*VENT	ING STUDIE	S	*		*		*				RICKEN	*	
				RANSON	IC *		1	*			*		*		*		* -[DMS		*	
		*WIND	TUN	NEL	*			*			*		*		*		*			*	
		*			*	_	:	*			*		*		*		*			*	
ARC					-				ETERMINE L			IRE				/				, *DMS-D	
66SWT						4 ET, 2 SF			ESSURE DIS				*0.6	-	*ARC					,R*VOLUM	
630				-SCALE					DNS ON THE				*2.0			OT BY 6-F			INTERNA	TI*MAY,	1974
IA29				HE SPA	_				R FUSELAGE				*			SUPERSONI				*	
CR-134,		-						-	CENT FLIGH				*		*WIN	TUNNEL			JIST , C		
				A/B I					PPORT VEHI				*		*				TTON, AM	IES*	
				ARC 6-				*VENT	ING STUDIE	S	*		*		*				RICKEN	*	
				RANSON	IC *			*			*		*		*		* -[OMS		*	
		*WIND	TUN	NEL	*	•		*			*		*		*		*			*	
		*			*			*			*		*		*		*_			*	
ARC									ETERMINE L			JRE								D*DMS-D	
66SWT						4 ET, 2 SF			ESSURE DIS				*0.6	-		·				RI *VOLUM	
630				-SCALE					ONS ON THE				*2.0			OT BY 6-1					1974
0A63				HE SPA					R FUSELAGE				*			SUPERSONI				IES*	
CR-134,								_	CENT FLIGH				*		*MIN	TUNNEL			RICKEN	*	
			_	A/B I					PPORT VEHI	CLE	*		*		*		* -	DMS		*	
				ARC 6-				*STUD	IES		*		*		*		*			*	
				RANSON	IC *			*			*		*		*		*			*	
		*WIND	IUN	NEL	*			*			*		*		*		*			*	
		*			*			*			*		*	,	*	,	*_			*	
ARC									UATE BASIC				* 0.0	10 /		•				, *DMS-D	
									ONIC STAB				*		*ARC					R*JAN.,	1974
169									ARACTERIST				*			-FOOT HYP			INTERNA	*111	
IA10				D VEHI					IRST AND		*		*			IC WIND TO				*	
CR-128	, /95				-				ND STAGE				*		*NEL				LEARY,		
				HYPER					EFINE ORBI				*		*				ENTHIN/		
				TUNNE	L (*				E EFFECTS				*		*	:			RESEARC	µн *	
	1	*IA10	,		*				CHARACTER				*		*	•		ENTER	v.==c	*	
		*			*				USING SOL	ID	*		*		*			. W. M	YERS	*	
		*			*			*PLUM	ES		*		*		*		*-	DMS		*	
		Ŧ			*			*			*		*		*		*			*	

					WIND	TUNNEL TEST	r / DMS	DATA	PROCES	SING					13
	*		*		*	· • • • •	*		*MODEL		*		COGNIZ	ANT * BA	SIC
TEST ID	*	REPORT TITL	* E *	CONFIGURATION TESTED	IS * *	TEST PURPOSE		PE OF	* *MACH	SCALE			TEST DM		
ARC		EFFOTO OF OU	DEAC+O			CTC OF TOC	T1+5000	· -	+0.04	,	*1.400	/ .	C C ACURY	ID /NAC+DMC D	B 0070
OHT6		ROUGHNESS O		89B-139B(MODIF NOSE)		RREGULARITI		Æ	*0.01 *6.0		*LARC *LARC		G.C.ASHBY,	JR./NAS*DMS-D *APRIL	
41		AERODYNAMIC		110327		ORE POSSIBL			*6.0				J. E. VAUG		, ,
115		ACTERISTICS				DARY LAYER			*		*ONIC TUN			*	
₹-134,0		E MODIFIED O			*PARA	TION HYSTER	REI*	•	*		*ACH 6)	*	•	*	
		HUTTLE ORBIT			*S EF	FECT	*		*		*	*	•	*	
	*A	T MACH 6 (LA	15) *		*		*		*		*	*	•	*	
31 AD	*		*		*		*		*	- /	*	, ,		*	
RLAD SWT				89B SPACE SHUT ORBITER FERRY					*0.040 *0.20	-	∗NR ∗NRLAD	•	T. SOARD /IR. B. LOWE		
13		MES ON SSV O				RIBUTIONS R		, E	*0.20	_	*LOW SPEE			*VOLUM *DCT	
157B		R SUBSONIC W		III IGORATION	_	NG FROM NAC			*		*TUNNEL	*	DING	*	157
		RESSURE DIST	_			LUMES ABOVE			*		*	*	•	*	
		ION	*			BELOW THE WI	-		*		*	+	, ·	*	
	*		*		*		*		*		*	• *	•	*	
RLAD				89B SPACE SHUT				-	*0.040	- ,	*NR	•	T. SOARD /		
SWT				ORBITER FERRY		_		E	*0.2	-	*NRLAD		R. B. LOWE	_	-
13 A57B		MES ON SSV O		NFIGURATION	_	RIBUTIONS R			*		*LOW SPEE	D WIND*	-DMS	*OCT.,	197
		R SUBSONIC W RESSURE DIST				NG FROM NAC LUMES ABOVE			*		*TUNNEL	*		*	
(-134,4		ION	* 100			ELOW THE WI			*		*		•	*	
	*	10.1	*		*	LLOW THE WI	*		*		*	*	•	*	
LAD	- *L	ANDING PRESS	URE *-	140 A/B SPACE	SH*PRES	SURE LOADS	DA*PRES	SURE	*0.040	5 /	*NR	/ *	T. L. SOARI	D. B. W*DMS-D	R-2081
WT				TTLE ORBITER		N GROUND EF			*0.2	•	*NRLAD			/ROCKWE * VOLUM	
1	/*A	B SPACE SHU	TTL *		*CT		*		*0.2		*LOW SPEE			*JAN.,	
169		ORBITER DET			*		*		*		*TUNNEL	*	H. C. ZIMM	ERLE *	
₹-141,5	-	INED IN THE I			*		*		*		*	*	-DMS	*	
		LOW SPEED W			*		*		*		*	*	•	*	
	*	UNNEL (OA69)	*		*		*		*		*	*	•	*	
RLAD	_ +1	ANDING DRESS	+-	140 A/B SPACE	*	CHDE LOADE	PA+DDEC	CUDE	*0.040	- /	* *NR	, .	T I COADI	n n hanne.n	D - 000 4
SWT				TTLE ORBITER		N GROUND EF			*0.040	- ,	*NRLAD			D, B. W*DMS~Di /ROCKWE*VOLUM	
1		B SPACE SHU		ORDITER	*CT	T GROUND EN	*		*0.2		*LOW SPEE			*JAN	
469		ORBITER DET			*		*		*		*TUNNEL		H. C. ZIMM		, , , ,
?-141,5		INED IN THE			*		*		*		*		-DMS	*	
		LOW SPEED W			*		*		*		*	*		*	
	. * T	UNNEL (OA69)	*		* ;		*		*		*	*	1	*	
1	*		*		*		*	:	*		*	I	:	*	

				WIND TO	JNNEL TEST	/ DMS DATA	PROCESSI	NG					134
											COGNIZANT	* BAS	10
TEST	*	* (0	NFIGURATIONS	*	TEST	* TYPE OF	*MODEL	AIF*	TESTING	*	TEST DMS	* PUBLIC	
ID	* REPORT TITLE	*	TESTED		PURPOSE	* TEST	*MACH RAI			*	PERSONNEL	*OR COM	
RC	- *EFFECTS OF REACTI	I *CONF	IGURATION 3A	*ASCER	TAIN THE E	FF*FORCE	*0.015	/ *A	RC /	*T.	J. DZIUBALA	/RO+DMS-DR	-2082
	- *ON CONTROL SYSTEM				OF RCS JET		*10.29-	-	RC -		WELL	*DEC.,	
67	/*JET SIMULATION O			*LOW F	IELD INTER	AC*	*	*3	.5-FOOT HYPE	ER∗J.	MARROQUIN	/R0*	
A73	*N THE STABILITY			*TIONS	WITH THE	LO*	*	*S	ONIC WIND TO	JN*CK\	WELL	*	
R-128,8	OO*AND CONTROL CHARA	Δ*		*CAL FI	LOW FIELD	ON*	*	*N	IEL	*M.	M. MANN	*	
	CTERISTICS OF A C)		*THE H	YPERSONIC .	A *	*	*		* - DI	MS	*	
	*.015-SCALE SPACE			*ERODY!	NAMIC AND	ST*	*	*		*		*	
	*SHUTTLE ORBITER	*		*ABILI	TY AND CON	TR*	*	*		*		*	
	MODEL IN THE AMES	S		*OL CH	ARACTERIST	IC*	*	*		*		*	
	*RESEARCH CENTER	*		*S OF '	THE ORBITE	R *	*	*		*		*	
	3.5-FOOT HYPERSON	N		*DURIN	G RE-ENTRY	. *	*	*		*		*	
	*IC WIND TUNNEL	*		*		*	*	*		*		*	
	*	*		*		*	*	*		. *		*	
ARC	- *RESULTS OF INVEST	T*SSV	140A/B ORBIT	E*TO DE	TERMINE SU	PE*FORCE	*0.015	/ *L	ARC /		H.CAMPBELL,		
PWT	- *IGATIONS (DA20) (0*R		*RSONI	C TRIM AND	\$*	*2.5 -	*L	ARC -	*M.	E.NICHOLS	/ROC*FEB.,	1974
057	/*N A O.015-SCALE	1*		*TABIL	ITY CHARAC	TE*	*4.6	*U	INITARY PLAN			*	
A20A	*40 A/B	*		*RISTI	CS FOR THE	*	*	* I	ND TUNNEL		P.PHILLIPS	/LAR*	
R-134,0	81*CONFIGURATION SPA	Δ*		*140A/	B ORBITER.	*	*	*		*C		*	
	CE SHUTTLE VEHICE	L		*		*	*	*			M. MANN	*	
	*E ORBITER MODEL :	I *		*		*	*	*		*-D	MS	*	
	*N THE	*		*		*	*	*		*		*	
	*NASA/LANGLEY RESI	E *		*		*	*	*		*		*	
	*ARCH CENTER UNITA	A *		*		*	*	*		*		*	
	RY PLAN WIND TUN	N		*		*	*	*		*		*	
	*EL	*		*		*	*	*		*		*	
	*	*		*		*	*	*		*		*	
RC	- *AIRLOADS INVESTIG	G*SSV	140A/B LAUNC	H*OBTAI	N PRESSURE	D*PRESSURE	*0.030	/ *A	•		L. GILLINS		
1TWT	- *ATIONS OF AN O.O.	3*			BUTIONS ON		*0.6 -		ARC -		EE/RI	*VOLUME	_
16	/+O-SCALE MODEL OF				ATED LAUNC		*1.4		11-FOOT TRAN			*FEB.,	1975
A14A	*THE SPACE SHUTTLE				LE: TO OBT	AI* '	*		VIC WIND TUN			*	
₹-134,4	43*VEHICLE 140A/B L			*N FOR	CE DATA	*	*	* L	_ (UNITARY)	*-D	MS	*	
	*UNCH CONFIGURATION			*		*	*	*		*		*	
	*N (MODEL 47-OTS)			*		*	*	*		*		*	
	*IN THE ARC 11-FO			*		*	*	*		*		*	
	*T UNITARY PLAN W			*		*	*	*		*		*	
	*ND TUNNEL FOR MA	-		*		*	*	*		*		*	
	*H RANGE O.6 TO 1	. *		*		*	*	*		*		*	
	*4 (IA14A)	*		*		*	*	*		*	1.	*	
	*	*		*		*	*	*		*		*	

) · · ·)

TEST	*			~													135
			* (CONFIGURATIONS	* *	TEST	*	TYPE OF		SCALE	* * TESTIN		* *	COGNIZANT TEST DMS		BASI	TIONS
ID	* REPO	ORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	,	*	PERSONNEL	*0	R COM	IENTS
				V 140A/B LAUNCH					*0.030) /	*ARC			. GILLINS,	E.*D	MS-DR-	2084
		5 DF AN 0.0				RIBUTIONS ON		RCE	*0.6		*ARC		*CHE			OLUME	-
716		E MODEL OF				RATED LAUNCH			*1.4					A. SARVER		IARCH,	1975
IA14A		PACE SHUTTL				CLE; TO OBTA	1*		*		*NIC WINE *L (UNITA		* J. I * - DM!		*		
CK-134,4		LE 140A/B L CONFIGURATIO			*N FL	RCE DATA	*		-		*L (ONTIA	KT)	+ - DM; +	•	-		
		DEL 47-0TS)			*		*		*		*		*		*		
	-	E ARC 11-FO			*		*		*		*		*		*		
		TARY PLAN W	-		*		*		*		*	•	*		*		
	ND TUI	NEL FOR MA	C		*		*		*		*		*		*		
	*H RANG	SE 0.6 TO 1	. *		*		*		*		*		*		*		
	*4 (IA	14A)	*		*		*		*		*		*		*		
	*		*		*		*		*		*	_	*		*		
				V 140A/B LAUNCH					*0.030		*ARC			GILLINS,			
		OF AN O.O				IBUTIONS ON	_	RCE	*0.6		*ARC		*CHE!	•		OLUME	
716		E MODEL OF				RATED LAUNCH			*1.4					A. SARVER	*д	PRIL,	1975
IA14A		PACE SHUTTLI LE 140A/B L				CLE; TO OBTA Drce data	1*		*		*NIC WIND *L (UNITA		* U. I. * - DM:		*		
CR- 143,4		CONFIGURAT			*N FL	IRCE DATA	÷				* CONTIA	KKT)	≁ -UM; *	•	*		
		DDEL 47-0TS	-		*		*		*		*		*		*		
		E ARC 11-FO	•		*		*		*		*		*		*		
		TARY PLAN			*		*		*		*		*		*		
	*IND TO	JNNEL FOR M	A *		*		*		*		*		*		*		
	CH RAI	VGE 0.6 TO	1		*		*		*		*		*		*		
	*.4 (I/	14A)	*		*		*		*		*		*		*		
	*		*		*		*		*		*		*		*		
				V 140A/B LAUNCH					*0.030	•		•		GILLINS,			
		5 OF AN 0.0				RIBUTIONS ON		RCE	*0.6		*ARC		*CHE	•		OLUME	-
716 IA14A		LE MODEL OF				GRATED LAUNCH CLE: TO OBTA			*1.4		*11-FUUI			A. SARVER	*A	PRIL,	19/5
		PACE SHUTTLI LE 140A/B L				RCE DATA	1.		-		*L (UNITA		* - DMS				
CK 143,4		CONFIGURAT			**	IRGE DATA	*		*		* (014114	(K1)	* - DM.	,	*		
		DEL 47-0TS			*		*		*		*		*		*		
		ARC 11-FO	•		*		*		*		*		*		*		
		TARY PLAN			*		*		*		*		*		*		
	*IND TU	JNNEL FOR MA	A *		*		*		*		*	;	*		*		
	CH. RAN	NGE O.6 TO	1	1	*		*		*		*		*		*		
	*.4 (1/	14A)	*		*		*	1	*:		*		*		*		
	*		*		*	,	*		* 1		*		*		*		

					WIND	TUNNEL TEST	/ (DMS DATA	PROCES	SING							136
	*		*		*		*		*MODEL	·	*		*	COGNIZANT		* BASI	C
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TEST	ING	*	TEST DMS		*PUBLICA	ATIONS
ID	*	REPORT	TITLE *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGEN	CY	*	PERSONNEL		OR COM	MENTS
ARC 11TWT				SSV 140A/B LAUNC					*0.030 *0.6	- ,	*ARC *ARC	/		. L. GILLINS. HEE/RI		_	
716	_		* AN O.O3 * ODEL OF			RIBUTIONS ON GRATED LAUNCH		URCE	*1.4	-		T TDANC		. A. SARVER		*VOLUME *APRIL.	
IA14A			SHUTTLE*			ICLE: TO OBTA			* 1.4					T.DAVIET		*	1973
			40A/B L *			ORCE DATA	**		*		*L (UNI			OMS		*	
CK 145,			FIGURATI*		#14 F	ORCE DATA	*		*		*	IAKI)	*	JMJ		*	
			47-OTS)*		*		*		*		*		*			*	
			C 11-FO *		*		*		*		*		*			*	
			Y PLAN W*		*		*		*		*		*			*	
			L FOR MA*		*		*		*		*		*			*	
			0.6 TO 1*		*		*		*		*		*			*	
		.4 (IA14A			*		*		*		*		*			*	
	*	(20170	*		*		*		*		*		*			*	
ARC	- *	ATRIDADS	INVESTIC*	SSV 140A/B LAUNC	H*ORT	ATN PDFSSHDF	D*P	DESCUDE	*0.030	n /	*ARC	/	*P	. L. GILLINS.	F	*DMS-DR	- 2084
11TWT			AN 0.03*			RIBUTIONS ON			*	,	*ARC	_		HEE/RI		*VOLUME	
716			ODEL OF *		_	GRATED LAUNCE	-	O. COC	*			T TRANS		. A. SARVER		*APRIL.	-
IA14A			SHUTTLE*			ICLE: TO OBT			*					.T.DAVIET		*	
			40A/B L *			DRCE DATA	*		*		*L (UNI			DMS		*	
011 140,			FIGURATI*		*	ONGE DATA	*		*		*		*	51.13		*	
			47-OTS)*		*				*		*		*			*	
			C 11-FO *		*		*		*		*		• *			*	
			Y PLAN W*		*		*		*		*		*			*	
			L FOR MA*		*		*		*		*		*			*	
			0.6 TO 1*		*		*		-		*		*			*	
		.4 (IA14A			*		-		*		*		*			*	
	*	.7 (14174	*		*		*				*		*			*	
ARC	- *	ATRI DADS	INVESTIG*	SSV 140A/B LAUNC	H*NRT	ATN PDFSSIDE	D*P	PESSUPE	*0.03	a /	*ARC	/	* P	. L. GILLINS,	F.	*DMS-DR	-2084
11TWT			*EO.O AN			RIBUTIONS ON			*0.6		*ARC	_		HEE/RI		*VOLUME	
716			ODEL OF *		_	GRATED LAUNCE	_	3,102	*1.4			T TRANS		. A. SARVER		*APRIL.	
IA14A			SHUTTLE*			ICLE: TO OBT			*					.T.DAVIET		*	
			40A/B L *			ORCE DATA	*		*		*L (UNI			DMS		*	
			FIGURATI*		*	UNUE UNIT	*		*		*	,,,,	*	J.,,G		*	
			47-OTS)*		*		*		*		*		*			*	
			C 11-F0 *		*		*		*		*		*			*	
			Y PLAN W*		*		*		*		*		*		i	*	
			L FOR MA*		*		*		*		*		*		,	*	
			0.6 TO 1*		*		*		*		* .	1	*			*	
		.4 (IA14A			*		*		*		*	1 31	*	1.		*	
	*		*		*		*	- 1	*		*		*			*	

137						SING	PROCES	DMS DATA	r /	WIND TUNNEL TEST	•				
CATIONS	* BAS *PUBLIC	COGNIZANT TEST DMS	*		TESTI	*		TYPE OF	*		ONFIGURATIONS	* C		*	TEST
MMEN 15	*OR COM	PERSONNEL	* 	Y 	AGENCY	CANGE *	*MACH	TEST	. 	* PURPOSE	TESTED	*	REPORT TITLE		ID
			_	,											
	E.*DMS-DR *VOLUME	L. GILLINS,		/	RC	/ *1	*0.030			HOBTAIN PRESSURE	•				ARC 11TWT
	*APRIL.	E/RI A. SARVER		TOANC				UKCE		*ISTRIBUTIONS ON *NTEGRATED LAUNCE			IONS OF AN O. Scale model o		716
, 1975	*AFRIL,	DAVIET					-			*VEHICLE; TO OBTA			E SPACE SHUTT		[A14A
	*		*-DM		(UNITA				WI.	*N FORCE DATA			HICLE 140A/B		
	*	13	*	461)	(CIAT I)	*	*		*	*N FORCE DATA			NCH CONFIGURA		JK 140,
	*		*			*	*		*	*			(MODEL 47-OT		
	*		*			*	*		*	*	i		THE ARC 11-F		
	*		*			*	*		*	*	1		UNITARY PLAN		
	*		*			*	*	•	*	*	1		TUNNEL FOR		
	*		*			*	*		*	*	:) 1*	RANGE 0.6 TO	*Cl	
	*		*			*	*		*	*	1	*	(IA14A)	` *	
	*		*			*	*		*	*	!	*		*	
R-2084	E.*DMS-DR	L. GILLINS,	*R.	/	RC	/ */	*0.030	RESSURE	D*1	H*OBTAIN PRESSURE	140A/B LAUNCH	rig*ssv	RLOADS INVEST	- *I	ARC
E 09	*VOLUME	E/RI		-	RC		*0.6	ORCE	_	*ISTRIBUTIONS ON			IONS OF AN O.	_	11TWT
1975	*MAY,	A. SARVER					*1.4			*NTEGRATED LAUNCE			SCALE MODEL C		716
	*	.DAVIET					*		AI*	*VEHICLE; TO OBT			E SPACE SHUTT		IA14A
	*	IS	*-DM	ARY)	(UNITA	*1	*		*	*N FORCE DATA			HICLE 140A/B		CR-141,
	*		*			*	*		*	*	•		NCH CONFIGURA		
	*		*			*	*		*	*	•		(MODEL 47-01		
	*		*			*	*		*	*	,		THE ARC 11-F		
	*		*			*	*		*	*	,		UNITARY PLAN		
	*		*			*	*		*	*	1		TUNNEL FOR		
	*		*			*	*		*	*	,) 1*	RANGE 0.6 TO		
	*		*			*	*		*	*		*	(IA14A)	*·'	
0.0004	E *DMC DD	. CTLLTNC	*	,	D.C	/ *	*0.030	DECCUBE		* I*OBTAIN PRESSURE	4404/8 LAUNCH	# ************************************	DI DADE TANGET		\RC
	*VOLUME	L. GILLINS, E/RI		/	RC	/ */	*0.030			*ISTRIBUTIONS ON	•		IONS OF AN O.		11TWT
1975	*MAY.	A. SARVER		TDANK			*1.4	UKCE		*NTEGRATED LAUNCH			SCALE MODEL O		716
1975	, ******* * *	DAVIET	-				*			*VEHICLE: TO OBTA			E SPACE SHUTT		A 14A
	*		*-DM		(UNITA		*		*	*N FORCE DATA			HICLE 140A/B		
	*	•	*	,	, 0	*	*		*	*	:		NCH CONFIGURA		,
	*		*			*	*		*	*	,		(MODEL 47-OT		
	*		*			*	*		*	*	,		THE ARC 11-F		
	*		*			*	*		*	*	,		UNITARY PLAN		
	. i 👍		*			*	*		*	*			TUNNEL FOR		
	*	1	*			*	*		*	*	1		RANGE 0.6 TO		
	*		* '			*	*		*	*	•	*	(IA14A)	*.	
	*		*	•	1	*	*		*	*	•	*		*	

TEST ID											- ,		DAIA	PROCES	331144						13
-		*				*			*			. 		*MODEL		*		*	COGNIZANT	* BAS	1C
ID		*				*	CONFIGURA	ATIONS	*	TEST	*	× Τ\	PE OF	*	SCALE	* T	ESTING	*	TEST DMS	*PUBLIC	ATION
		*	REPOR	T TIT	LE	*	TEST	ED	*	PURPOSE	*	* 7	TEST	*MACH	RANGE	* A	GENCY	*	PERSONNEL	*OR COM	MENTS
2							SV 140A/B							*0.030		*ARC	•		L. GILLINS, E.		
			TIONS							IBUTIONS			CE	*0.6		*ARC			IEE/RI	*VOLUME	
			-SCALE							RATED LAL				*1.4					A. SARVER	*MAY,	197
44			HE SPA							CLE; TO C	BTAI			*			WIND TUNN			*	
141,5	503		EHICLE		•		•		*N F0	RCE DATA	*	k		*		*L (UNITARY)	* -D	IMS	*	
			UNCH C						*		*	k		*		*		*		*	
			N (MOD						*		*	k		*		*		*		*	
			N THE						*		×	*		*		*		*		*	
			T UNIT			-			*		*	k		*		*		*		*	
			ND TUN	_	_				*		×	*		*		*		*		*	
			H RANG		TO 1	*			*		*	k		*		*		*		*	
		*.	4 (IA1	4A)		*			*		,	*		*		*		*		*	
		*_				*		_	*		· - - '	* 		*	_	*	,	*		*	
							PACE SHUT						SSURE	*0.010		*ARC	•		H. DYE, R. B		
			_				GRATED VE				– –			*0.10	•	*ARC			NGSLAND /ROCK	WE*JAN.,	198
_	/						ESSURE MOI		_					*5.3			-FOOT HYPE			*	
0			CALE S				rs			ORRELATE				*7.4					A. SARVER	*	
			E VEHI							AMIC HEAT				*		*NEL			C. ZIMMERLE	*	
167,	344		26-0TS							AND VER				*		*		*-[DMS	*	
			SA/ARC						*DADS	PREDICT	LONS	*		*		*		*		*	
			YPERSO						*		•	*		*		*		*		*	
			UNNEL		SOHI	*			*		,	*		*		*		*		*	
			AND I	H2)		*			*		,	*		*		*		*		*	
		*			.	* .			*			*		*	/	*		*		*	
AD							39B ORBIT			MIZE AIR			CE	*0.040			•		.C. MENNELL AN		
Т							PACE SHUT							*0.21	-	*NRL			SOARD / ROCK	ME*LER.	191
40	/						TER/ET			EM NACELI				*			SPEED WIN			*	
1C			YSTEM							NLET DES				*		*TUN	INEL		. E. POUCHER	*	
134,0	078		HUTTLE							DETERMIN				*		*		*-[DMS	*	
			BSONIC							CT OF THE				*		*		*		*	
			ND CON	-	CHAR	*				N ON THE				*		*		*		*	
		∓A	CTERIS	TES		*			-	STABILIT				*		*		*		# .t.	
		*				*				ROL CHAR	ACTER	*		*		*		*		*	
		*				*			*ISTI	US		∓ ∸		∓		*		∓		# 	
	1	平				*			*		:	*		*		*		*		*	
	1											1					1 1		;	-	
												:			1	İ		1			

)

		***********			WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING							139
	*		*	~	*		*		*MODEL		*		*	COGNIZANT	*	BAS	IC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF		SCALE		TING	*	TEST DMS		PUBLIC.	
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGE	NCY	*	PERSONNEL	*1	OR COM	MENTS
MSFC		EFFECT OF ENGINE						DRCE	*0.005			_/		D. JOHNSON ,			
14TWT		SHROUD CONFIGURA		· · · · · · · · · · · ·					*0.4	-	* NSI	/	*FC			SEPT.,	1974
578		ION ON THE STATE				E AND SHAPE C	*		*4.96		*MSFC	-		F. BRADDOCK	/ N*		
SA10F		AERODYNAMIC	_	RB WITH VARIED S			*		*			ICH TRIS			*		
CR-134,1		CHARACTERISTICS (0*		*		*IC W	ND TUNN		W. SPARKS	*		
		F A 0.00563 SCAL		· · · · · · · · · · · · · · · · · · ·	*F T	HE SRB	*		*		*			W. SPARKS	*		
		142-INCH DIAMETE		ES	*		*		*		*		*-D	MS	*		
		R SOLID ROCKET	*		*		*		*		*		*		*		
		BOOSTER	*		*		*		*		*		*		*		
1.450	*		*	40 THOLL COLTD DO	*	NOV. 1441.00 OF	*	ODOF	* 000	40 /	*	,	*	D. IOUNCON/M	* ************************************	DMC DD	0000
LARC 8TPT		AERODYNAMIC CHAR.				DURING FREE-F		UKCE	*0.02		*LARC	-		D.JOHNSON/M: D.RADFORD/N:		JULY.	-2088 1974
655		CTERISTICS OF A			*KB I	JUKING LKEE-L	A +		*1.2	-				E. VAUGHN) T	UULT,	1974
8TPT		42-INCH DIAMETER SOLID ROCKET	*		*LL				*1.2					T. KAVANAU	~u +		
6 62		BOOSTER (CONFIGU			-		-				*NNEL	RESSURE	*-D		JN +		
SA2FA		ATION 139)	Α÷		-							T TRANS	_	MJ			
SA2FB	*	•	*		<i>-</i>		-		*			RESSURE			*		
CR-134.1			*		*		*		*		*NNEL	CJJOKE	*		*		
OK 104,	*		*		*		*		*		*		*		*		
LARC	- *	RESULTS OF INVEST	T * 1	40A/B	*VER	FY LONGITUDI	N*F	DRCE	* 0.01	5 /	*LARC	/	*J.	H. CAMPBEL	. II*I	DMS-DR	-2089
8TPT		IGATIONS ON AN O				ND LATERAL-D			*0.35		*LARC	-		D M. E. NIC			
661		015-SCALE CONFIG				IONAL CHARAC			*1.2			T TRANS		ROCKWELL IN		•	
0A25		RATION 140A/B SP				TICS OF 140A			*			RESSURE			*		
		CE SHUTTLE ORBIT				BITER, DETER	•		*		*NNEL			P. PHILLIP	S/LA*		
		R MODEL (49-0) II				SURFACE DEFL			*		*			LEY RESEARCE			
		THE NASA/LANGLEY				N EFFECTS ON			*		*		*NT		*		
		RESEARCH CENTER				CLE PERFORMA			*		*			W. MYERS	*		
	*	8-FOOT TRANSONIC	*		*CE.	AND TO DETER	M*		*		*		*-D	MS	*		
	*	PRESSURE TUNNEL	(*			COMPONENT BU			*		*		*		*		
	*	OA25)	*		*LDUF	EFFECTS	*		*		*		*		*		
	*		*		*		*		*		*		*		*		
LARC	- *	SUPERSONIC PERFO	R*0	89B-139B ORBITER	*TO 5	STUDY THE SUP	E*F	ORCE	* 0.01	875/	*LARC	/	∗G.	M. WARE/LAI	₹C +I	DMS-DR	-2090
UPWT :	- *	MANCE, STABILITY	*C	ONFIGURATION	*RSON	NIC AERODYNAM	! *		*1.9	-	*LARC	-	*R.	W. POWELL/	_ARC+I	MARCH,	1974
1040	. /*	AND CONTROL CHAR	A *		*C CH	MARACTERISTIC	S*		*2.86		*UNITA	RY PLAN		E. VAUGHN	*		
LA8C		CTERISTICS OF A	_		*OF /	ROCKWELL IN	*		*		*IND 1	UNNEL		W. MYERS	*		
CR-134,C		.01875 SCALE MOD			*		*		*		*		*-D	MS ;	*		
1		L ROCKWELL INTER		; • • •	*		*		*		*		*	1	*		
**1		ATIONAL 089B-139			*		* ,		*		*		ji 🔻 🗀		*		
		ORBITER CONFIGUR	*		*		*	į.	*	1.11	*		*		*		
	*	ATION (LASC)	*		*		*		*		*		*		*		
	*		*		*		*		*		*		*		*		

					WIND	TUNNEL TEST	/ DI	AS DATA	PROCES	SING					14
	*	•	*		*		*		*MODEL	_	*	*	COGNIZANT	* BASIC	3
TEST	*		. *	CONFIGURATION	-	TEST		TYPE OF			* TESTIN		TEST DMS	*PUBLICAT	
ID	•	REPORT TITLE	*	TESTED	* 	PURPOSE	* ·	TEST	*MACH	RANGE	* AGENCY	* 	PERSONNEL	*OR COMME	
400		CURCULTO AND T	DARLAL.	0 400 0007750	*EEE			205	**			/	COENCED /NACA		2004
ARC TPT		SUBSONIC AND T SONIC AERODYNA		U-100 DEBLIER		CTS OF WING T LEADING E		RCE .	*0.35 *1.2		*LARC . *LARC		SPENCER /NASA E. POUCHER	*MARCH.	
		CHARACTERISTIC			_	ONFIGURATION			*		*8-FOOT T			*	,,,
17B	•	ASSOCIATED WIT	_		*	JIII TUDKA I TOK	*		*		*IC PRESS)-13	*	
		ARIATIONS IN T			*		*		*		*NNEL	*		*	
		GEOMETRY OF TH			*		*		*		*	*		*	
		ORWARD PORTION			*		*		*		*	*		*	
	*	IRREGULAR PLAN	IFO *		*		*		*		*	*		*	
	*	RM WINGS ON A	.01*		*		*		*		*	*	•	*	
	*	875 SCALE LO-1	100 *		*		*		*		*	*		*	
	*	LANGLEY CONCER	T S*		*		*		*		*	*		*	
	*	PACE SHUTTLE C	RBI*		*		*		*		*	*		*	
	*	TER IN THE LAN	IGLE*		*		*		*		*	*		*	
	*	Y 8-FOOT TPT (LA7*		*		*		*		*	*		*	
	*	·B)	*		*		*		*		*	*		*	
	•	*	*		*		*		*		*	*		*	
ARC		HYPERSONIC STA						RCE.	*0.004		*LARC	•	AVID R. STONE/I		
2HT		ITY AND CONTRO				ERSONIC AERO			*17.6		*LARC	- *RC		*NOV.,	19
15		HARACTERISTICS				IC PERFORMAN			*21.6				BERT MULFINGER	R/*	
172		A 0.004 SCALE				DNGITUDINAL			*		*TUNNEL	*R1		*	
4-X		MODEL (34-0) F				M, AND STAT			*		*		. M. MANN	*	
71968		WELL INTERNATI				BILITY AND (*		*	*-[OMS	*	
		L SPACE SHUTTL				L AND DETERM			*		*	*		*	
		RBITER VEHICLE	-			HE EFFECT	*		*		*	*		*	
		CONFIGURATION	(OA*			REYNOLDS NU			*		*	*		*	
	*	*-72)	*			N LONGITUDI	VAL*		*		*	*		*	
		•	*		*STA	BILITY.	*		*		*	*		*	
	. *		*		*		*		*	. ,	*		0 411511/07	*	
SFC		EFFECT OF EXTE						RCE	*0.00	•	*MSFC		. C. ALLEN/RI	*DMS-DR-2	
4TWT	_	L TANK NOSE SH		•					*0.6			-	. W. SPARKS	*MARCH,	19
35		ON THE ROCKWEL				GRATED VEHIC			*4.96				. L. GLYNN	*	
137B		INTERNATIONAL							*		*IC WIND	IUNNEL * -	JW2	*	
(-134,0	790	FCE SHUTTLE VEH FE 3. (INTEGRAT	11CL*5) :DD	*ACT	ERISTICS OF	SE*		*		*	*		*	
				SKD, 512			L 5*		*		∓	*		∓	
	١.	CONFIGURATION	*A1)		*HAP	£5	*		*		<i>∓</i>	*		∓	
		+37B)	*	1 1	*		*		*		∓	*	1.7	≠	
	4	•	*	1.1	*		*	:	. ≭			*	<u> </u>	#	
		1	!				1				1.1	1			

			WITHIN THRIBEL TEAT	/ 5MG BATA	DDGGECGTNG			
			WIND TUNNEL TEST	/ UMS DATA	PROCESSING			141
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCALE *MACH RANGE	E* TESTING E* AGENCY	* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
			* FURFUSE		RANGE		+ PERSUNNEL	TOR COMMENTS
С	- *FLUTTER TESTS (OS	*RASTC WING AND 1	1+ACOULDE EXDEDIME	N+STD!!!!! - !!! \	I*A 55 -	*LARC /	*MICHAEL A. KOTCH	*DMS=DD=2004
	- *1) OF THE 0.02-SC				*1.3	*LARC -	*A. T. KAVANAUGH	
_ ·	/*ALE ORBITER WING				*	*26-INCH TRANSO		*
	*ELEVON SEMI-SPAN	*ROTATIONAL FREQ	*RANSONIC FLIGHT	*	*	*NIC BLOWDOWN	T*	*
134,0	73*MODEL 23-0	*BASIC WING AND 1	*REGIME TO SUPPOR	T*	*	*UNNEL	*	*
	*	*HZ INBD AND 11 H	*ANALYTICAL FLUTT	*	*	*	*	*
		*Z OUTBOARD ELEVON	· - · · · · · · · · -	*	*	*	*	*
	*	*ROTATIONAL FREQ	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
	- *AN INVESTIGATION		*VERIFY THE STABI		*0.6 -	•	*R. MULFINGER / I	
	- *OF THE STABILITY		*ITY AND CONTROL		*4.96	*MSFC -	*OCKWELL INTERNAT	[*SEPT., 1974
]	/*AND CONTROL CHARA	*	*HARACTERISTICS O	F*	*	*14-INCH TRISO		*
9	*CTERISTICS	*	*THE VEHICLE 4	*	*	*IC WIND TUNNER		*
- 134,4	04+0F THE VEHICLE 4	*	*CONFIGURATION	*	*	*	*M. M. MANN	* .
	*CONFIGURATION *	*	*	*	*	*	*-DMS *	*
lC	* - *HEAT TRANSFER TES	* +0.1005D75.4M3V5W07	* ***************************	* ************************************	*	* '		*
	- *TS OF AN 0.006-SC		*TRY HEATING DIST		*8.0 -	*LARC / *LARC -	*D. G. WALSTAD/ROC *KWELL INTERNATION	
	/*ALE THIN SKIN SPA			• •	*8.0 - *8.0	*MACH 8 VARIABI		N*AUGUSI, 1974
3	*CE SHUTTLE THERMO		*ORRELATE PHASE C	-			E*P. LAWING/NASA	•
_	O1+COUPLE MODEL (41-		*ANGE PAINT DATA		*	*RSONIC TUNNEL		*
	*O) IN THE LANGLEY		*ITH THERMOCOUPLE		*	*	*-DMS	*
	*RESEARCH CENTER		*DATA	*	*	*	*	*
	*VARIABLE DENSITY		*	*	*	*	*	*
	*TUNNEL AT M=8	*	*	*	*	*	*	*
	*	*	*	*	* .	*	*	*

						WIND	TUNNEL TES	т / г	MS DATA	PROCES	SING						14
	*			*		*		*		*MODEL		*			COGNIZANT	* E	BASIC
TEST				*	CONFIGURATIONS	*	TEST		TYPE OF			* TESTIN		٠ ٦	TEST DMS		ICATION
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	* 	· ·	PERSONNEL	*OR (COMMENTS
MD1 40	_	00MTT1##	5 THUEST		101/9 991 999	.					- /		,				DD 4007
NRLAD LSWT		GATIONS			40A/B SSV ORBIT		TIATED ON T		JRCE	*0.040 *0.2		*NR *NRLAD			MENNELL/ROCK INTERNATIONAL		
715		AL LOW S			•		A16, 0A71A,			*0.2		*LOW SPEE				. +00M	-, 15,
0A62A		TUNNEL I					A71C FOR OF			*		*TUNNEL		-DMS		*	
		EFFECTS					NG THE AIR			*		*	*	k	•	*	
,		R BREATH					ING PROPULS			*		*		k .		*	
		LSION SY					TEM (ABPS)			*		*		k		*	
		RBITER S				-	NVESTIGATE			*		*		k		*	
	*	STABILIT	Y AND CO	N*		*AER	ODYNAMIC EF	FEC*		*		*	2	k		*	
	*	TROL CHA	RACTERIS	T*		*TS	OF VARIOUS	NAC*		*		*	*	k		*	
	*	ICS (OA6	2A)	*		*ELL	E NUMBER/LO	CAT*		*		*	,	k		* .	
	*			*		*10N	CONFIG. ON	I TH∗		*		*	,	k		*	
	*			*		*E 0	RBITER STAE	BILI*		*		*	,	k		*	
	*			*		*TY	AND CONTROL	_ CH*		*		*	,	k i		*	
	*			*		*ARA	CTERISTICS	*		*		*	,	k		*	
	*			*		*		*		*		*	3	k		*	
ARC					10C5D7F4M3V5W87				EAT-TRAN						G. WALSTAD AN		
					10C5D7F4M3V5W87	T*VES	TIGATE THE	ASC*		*5.3	-	*ARC			J. GRIFALL/ F		., 197
172	•	ALE THIN					HEATING OF			*5.3					WELL INTERNAT	「 I *	
IH15					10C5D7F4M3V5W87	. – –		/EHI*		*		*SONIC WI			-	*	
CR-134,		(41-OTS)			•	*CLE		*		*		*NEL			L. LOCKMAN/AF	₹C*	
		MES 3.5-		*1	8	*		*		*		*			L. MULKEY	*	
	*	AT M=5.3		*		*		*		* .		*			W. MYERS	*	
	*			*		*		*		*		*		+-DM	5	*	
	*			_*		*		*		*		*		*		*	
AEDC		DATA REP			!2-0T		T TRANSFER	EFF*H	EAT-TRAN						F. FOSTER, W.		
HWTB	_	ESTS ON				*ECT	S	*		*8.0	-				GRIFALL /ROC		
VA352 OH4B		TRANSFER OF THE O				*		*		*8.0		*HYPERSON				*FEB	., 197
		LE ROCKW				*		*		*		*U TUNNEL			A. SARVER J. FRICKEN	*	
CK-134,		NATIONAL				*		*		*		*		* - DM	• •	*	
		UTTLE VE				±		-		-		+ +		* - DW	3	-	
		EL 22-0T				÷		∓		*		→		*		*	
		EDC 50-1				*		*		*		*		*		*	
		D TUNNEL		*		*		*		*		*				*	
			•	*		*		*		*	•	*		*		*	
		1.				•		•		•		•			1.1	•	
			1.			1									- 12 h		
							1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	1		A 1 1 1 1 1 1			1				

							WIND '	TUNNEL TES	T /	DMS DATA	PROCES	SING					143
	*			*			*		*		*MODEL	·	*	*	COGNIZANT	* BASIC	
TEST	*			*	CONFI	GURATIONS	*	TEST	*	TYPE OF	*	SCALE,	* TESTING	*	TEST DMS	*PUBLICATI	2001
ID	*	REPORT	TITLE	*	T 	ESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMEN	1TS
		D.T. DE	Fan					*********				/			E EOSTED W	*DVC DD 00	000
C B			ORT FOR THE HEAT		2-01		*HEAT	TRANSFER	EFF*H	EAI-IRAN	*8.0	-	*AEDC / *AEDC -		F. FOSTER, W. GRIFALL/ROCKW		
52			R EFFECTS				* EU 13		-		*8.0 *8.0		*AEDC *HYPERSONIC WI		GRIFALL/RUCKW		∠ 1975
B B	•		0.0175-S	_			*		*		*0.0		*D TUNNEL (B)		A SARVED	*	1975
-			VELL INT				*		*		*	,	*D (ONIVEE (D)		J. FRICKEN	*	
137,			SPACE				*		*		*		*	*-DN		*	
			HICLE MO				*		*		*	,	*	*		*	
			IN THE				*		*		*		*	*		*	
			INCH WIND				*		*		*		*	*		*	
		TUNNEL.		*			*		*		*	,	*	*		*	
	*			*			*		*		*	,	*	*		*	
C	- *	DATA REF	PORT FOR	T*2	2-0T		*HEAT	TRANSFER	EFF*H	EAT-TRAN	5*0.017	75 / 3	*AEDC /	*T.	F. FOSTER, W.	*DMS-DR-20)99
В			THE HEAT				*ECTS		*		*8.0		*AEDC -		GRIFALL/ROCKW		
52	/*	TRANSFER	R EFFECTS	S *			*		*		*8.0	,	*HYPERSONIC WI	N*LL	·	*FEB., 1	1975
В	*	OF THE C	0.0175-50	CA*			*		*		*		*D TUNNEL (B)	*D.	A. SARVER	*	
134,4	439*	LE ROCKY	VELL INTE	ER*			*		*		*	,	*	*B.	J. FRICKEN	*	
	*	NATIONAL	SPACE S	SH*			*		*		*	,	*	*-DN	4S	*	
	*	UTTLE VE	HICLE MO	DD *			*		*		*		*	*		*	
	*	EL 22-01	IN THE	A *			*		*		*	,	*	*		*	
	*	EDC 50-1	INCH B W	IN*			*		*		*		*	*		*	
	*	D TUNNEL	-	*			*		*		*	3	*	*		*	
	*			*			*		*		*	*	*	*		*	
С	- *	PHASE CH	ANGE PAT	IN*O	RB.(VL	70-000139)	*DETEI	RMINE INTE	RFE*H	EAT-TRANS	5*0.017		*AEDC -		QUAN,C.CRAIG/R		
В						78-00041)					*8.0				M. MOSER JR.	*JUNE,	1974
89	/*	LL ORBIT	TER/TANK	A * A	ND ORB	. ALONE	*HEAT	ING RATES	ON *		*8.0	2	*D TUNNEL (B)	*-D#	AS	*	
A	*	ND ORBIT	TER ALONE	E *R	I ORBI	TER (VL70-	*AN QI	RBITER/TAN	K *		*	,	*	*		*	
В	*	CONFIGUE	RATIONS	*0	00139)		*CONF	IGURATION	AND*		*	,	*	*		*	
134,0)75×			*		•		N ORBITER			*		*	*		*	
	*			*			*ONE,	W DNA HTIW	ITH*		*	*	*	*		*	
	*			*				TPS TILE S	*UMI		*	*	*	*		*	
	*			*			*LATI	DN.	*		*	*	*	*		*	
	*			*			*		*		*	*	*	*		*	
										•							
																:	
	1.1	•				:							;		1		
	(44)		i			1									į N		

				WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING					144
	*	*		*		*	•	*MODEL		*	*	COGNIZANT	*	BASIC
TEST		*	CONFIGURATIONS	*	TEST		TYPE OF			* TESTING	*	TEST DMS		BLICATIONS
ID	* REPORT TITLE	*	TESTED	* · • • • • •	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*0R	COMMENTS
	- *HEAT TRANSFER P						HEAT-TRANS					JONES, T. CR		
	- *SE CHANGE PAINT 5/*EST (OH-42) OF							*8.0 *8.0		*LARC - *MACH 8 VARIAB		P. LAWING/NA		N., 19/4
	3/*ROCKWELL		1707M4F5W104E221 R5		JRATIONS ON			*		*E-DENSITY HYP				
142A	*INTERNATIONAL S							*		*RSONIC TUNNEL				
142B	*ORBITER IN THE				ING RATES			*		*		G. RICH/RI	*	
142C	*ASA/LRC MACH 8			/*BOUN	DARY LAYER	T *		*		*	∗Ď.	A. SARVER	*	
≀-134,07	76*RIABLE DENSITY	*7	R5H17	*RANS	ITION DURIN	√G *		*		*	*G.	G. MCDONALD	*	
	*WIND TUNNEL	*		_	JLATED ENTRY	/ C*		*		*	* - D1	MS	*	
	*	*			TIONS	*		*		*	*		*	
	*	*		*		*		*	. ,	*	*	+ DETDO371	*	S DD 0400
	- *RESULTS OF INVE		1+L+P1+A1+F		CTS OF VARI		-ORCE	*0.010 *7.3		*ARC /		T. PETROZZI, D. MILAM /RI		
	<pre>- *IGATIONS ON A O /*10-SCALE MODEL</pre>				EVON, RUDDI CHING STRUC			* 7.3		*ARC - *3.5-FOOT HYPE				KIL, 19/4
15	*THE	*			FAIRINGS			* 7.3		*SONIC WIND TU			*	
	89*CONFIGURATION 3	S*			MAIN PROPUL	•		*		*NEL		A. SARVER	*	
. ,5.,,00	*PACE SHUTTLE OR				ROCKET PLUM			*		*		G. MCDONALD	*	
	*TER AND EXTERNA				DNGITUDINAL			*		*	*-D		*	
	TANK IN THE NAS	A/			ATERAL-	*		*		*	*		*	
	AMES RESEARCH C	EN		*DIR	CTIONAL STA	ABI*		*		*	*		*	
	TER 3.5-FOOT HY	PE		*LIT	CHARACTER:	IST*		*		*	*		*	
	RSONIC WIND TUN	NE		*ICS		*		*		*	*		*	
	*L (IA15)	*		*		*		*		*	*		*	
	*	* .		*		*		*		*	*		*	
	- *WIND TUNNEL TES											C. ALLEN/ROCK		
	<pre>- *RESULTS OF FAIR /*GS ON A 0.004 S</pre>				FULL LENGTH			* 0.00 *0.6		*MSFC - *14-INCH TRISC		INTERNATIONA		7KIL, 1974
	- *LE MODEL ROCKWE		034)(114)(312)		AIRING ON	IAT		*5.0		*IC WIND TUNNE		•		
62F	*SPACE SHUTTLE I				AL FORCE	*		*		*TRISONIC WINE				
	94*EGRATED VEHICLE			*	101102	*		*		*TUNNEL		E. VAUGHN	*	
	*ERODYNAMIC CHAR			*		*		*		*		G. MCDONALD	*	
	TERISTICS AT MA	сн		*		*		*		*	* -D	MS	*	
	*NUMBERS FROM O.			*		*		*		*	*		*	
	*TO 4.96 (IA62F)	*		*		*		*		*	*		*	
	*	*		*		*		*		*	*		*	
1	1													
1	1.1		1		· .							::14		
	. *											134 PM		

				WIND TUNNEL TEST /	DMS DATA	PROCESSING	1		145
	*	*		*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	*	CONFIGURATIONS TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* * SCAL *MACH RANG		* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
RLAD	- *INVESTIGATION	DF *1	40A/B SSV ORBITE	*ESTABLISH BASIC L	*FORCE	*0.0405 /	' *NR /	*R. MENNELL/RI SP	A * DMS - DR - 2 104
	- *SPACE SHUTTLE			*ONGITUDINAL STABI		*0.12 -	*NRLAD -	*CE DIVISION	*VOLUME 01
17	/*ITER SUBSONIC	STA*		*LITY CHARACTERIST	*	*0.26	*LOW SPEED WIN	D*T. HUGHES/RI SPA	C*JULY, 1974
62B	*BILITY AND CON	TRO*		*ICS IN AND OUT OF	*	*	*TUNNEL	*E DIVISION	*
!-134,1	12*L CHARACTERIST			*GROUND EFFECT AN	*	*	*	*M. M. MANN	*
	*IN THE NAAL LO			*D LATERAL-DIRECTI	*	*	*	*-DMS	*
	SPEED WIND TUN	NEL		*ONAL STABILITY CH	 *	*	*	*	*
	*(OA62B)	*		*ARACTERISTICS IN	*	*	*	*	*
	*	*		*FREE AIR	*	*	*	*	*
	*	*	404 /	*	*	*	*	*	*
			•	*ESTABLISH BASIC L		* 0.0405 /	•	*R. MENNELL / ROC	
WT 7	- *SPACE SHUTTLE			*ONGITUDINAL STABI		*0.12 -	*NRLAD -	*WELL INTERNATION	
, 62B	/*ITER SUBSONIC *BILITY AND	* *		*LITY CHARACTERIST	*	*0.26		D*L / SPACE DIVISI *N	U*AUGUS1, 1974
	13*CONTROL CHARAC			*ICS IN AND OUT *OF GROUND EFFECT	±	*	*TUNNEL	*T. HUGHES / ROC	. * V.
134, 1	*ISTICS IN THE			*AND LATERAL-DIRECT		*	* *	*WELL INTERNATION	
	*L LOW SPEED WI			*TIONAL STABILITY		*	*	*L / SPACE DIVISI	
	*TUNNEL (OA62B)	*		*CHARACTERISTICS	*	*	*	*N	*
	*	*		*IN FREE AIR.	*	*	*	*M. M. MANN	*
	*	*		*	*	*	*	*-DMS	*
	*	*		*	*	*	*	*	*
RC	- *TRANSITION HEA	TIN+0	RBITER + EXTERNA	*TO INVESTIGATE AS	*HEAT-TRAN	NS*8.O -	*LARC /	*J. CUMMINGS/RI	*DMS-DR-2105
				*CENT HEATING OF T		*8.0	*LARC -	*D. A. SARVER	*SEPT., 1976
	/*ON A MATED AND			*HE COMBINED TANK		*	*MACH 8 VARIAB	L*J. E. VAUGHN	*
17	*OLATED 0.006 S	CAL+E	XTERNAL TANK ALC	*AND ORBITER	*	*	*E-DENSITY HYP	E*-DMS	*
-144,5	94*E MODEL (41-OT) S*N	E, SSV MODEL 41-	*	*	*	*RSONIC TUNNEL	*	*
	*PACE SHUTTLE O	RBI *0	TS	*	*	*	*	*	*
			RBITER ALONE, SS	;*	*	*	*	*	*
	*TANK IN THE NA		MODEL 41-OTS	*	*	*	*	*	*
	*LARC VARIABLE			*	*	*	* .	*	*
	SITY HYPERSONI	C T		*	*	*	*	*	*
	*UNNEL	*		*	*	*	*	*	*
	*	*		*	*	*	*	*	*
RC				*MEASURE DYNAMIC S		* .0165 /	•	*D.C. FREEMAN, R.	
_	- *C STABILITY DE		t	*TABILITY DERIVATI		*	*LARC -	*. BOYDEN, E.E. D	A*JAN., 1975
	9/*ATIVES OF A MOI) T F *		V-3	*	*	*UNITARY PLAN		*
14A 14B	*IED 089B	*		*(SEE ALSO LA-20 F	1	∓	*IND TUNNEL	*J. E. VAUGHN	*
148 -X	*SHUTTLE ORBITE	< *	•	*OR LOW MACH NO.DA	*	*	*	*J. E. VAUGHN	*
- X 2630	▼	*		*TA)	•	*	*	*-DMS	∓
2030	- -	-		~	-	-	7	*	*

					WIND 1	UNNEL TEST	/	DMS DATA	PROCES	SING			- -				146
	*		*		*		*		*MODEL				*		NIZANT	* BASI	
TEST	*		*	CONFIGURATIONS		TEST		TYPE OF		-	* TESTI			_	DMS	*PUBLICA	
ID	*	REPORT TIT	LE *	TESTED	* ·	PURPOSE	*	TEST	*MACH	RANGE	* AGENO	; Y	*	PER	RSONNEL	*OR COM	1EN15
LARC	- * S	UBSONIC AND	TRAN*	089B ORBITERW/MOD	*MEASL	JRE DYNAMIC	S*1	FORCE	* .016	55 /	*LARC	/	*D.	C. F	REEMAN/NA	S*DMS-DR-	-2107
8VDHT	- *S	ONIC DYNAMI	C STA+	. NOSE	*TABIL	ITY DERIVA	*ITA		*.3	-	*LARC	-	*A-1	LARC		*MARCH,	1975
653	/*B	ILITY DERIV	'ATIVE*	•	*VES		*		*1.2		*MACH 8	VARIABI	_*J.	E. \	/AUGHN	*	
LA2O	*S	OF A	*	•	*(SEE	ALSO LA-14	1 T*		*		*E-DENSI	TY HYPE	E∗J.	E. \	/AUGHN	*	
TM-X	* M	ODIFIED 089	B SHU*	•	*EST F	RESULTS FOR	₹ H \$		*		*RSONIC	TUNNEL	* - DI	MS		*	
72631	*7	TLE ORBITER	4	•	*IGHE	R MACH NO.	DA*		*		*		*			*	
	*		*	•	*TA)		*		*		*		*			*	
	*		*	•	*		*		*		*		*			*	
LARC	- *R	ESULTS OF T	ESTS +	B26C9E26F8M7N25R	S*OBTA	IN LOCAL PE	RES*I	FORCE	* 0.0	15 /	*LARC	/	*D.	E. 1	THORNTON A	N*DMS-DR-	-2108
UPWT	- *(DA64 AND IA	35) 04	N116	*SURE	DISTRIBUTI	*N01		*2.5	-	*LARC	-	*D I	R. H.	. SPANGLER,	/*MAY,	1974
1063	/*F	AN 0.015-5	CALE 4	B26C9E26F8M7N25R	5*S ON	ORBITER FL	JSE*		*4.5		*UNITARY	PLAN V	#R0	ĆKWEL	L INTERNA	T *	
IA35	* N	ODEL (36-01	'S) OF*	N116S12T12	*LAGE	TO SUPPORT	Γ V*		*		*IND TUN	INEL	* I O!	NAL		*	
DA64	* T	HE SPACE SH	IUTTL *	•	*ENTIN	NG STUDIES	AN*	•	*		*		*B.	W. N	MYERS	*	
CR-134,	084 * E	CONFIGURAT	TON 14	•	*D TO	DETERMINE	EF*		*		*		* - DI	MS		*	
	4	OA/B IN THE	NASA	•	*FECT	OF ELEVON	DE*		*		*		*			*	
	*/	LARC UNITAR	Y PLA	t.	*FLECT	TIONS IN TH	₹E *		*		*		*			*	
	*/	WIND TUNNE	L *	t .	*AFT F	ORTION OF	TH*		*		*		*			*	
	*		*	r	*E ORE	BITER FUSE	_AG*		*		*		*			*	
	*		*	•	*E		*		*		*		*			*	
	*		*	·	*		*		*		*		*			*	
LARC	- *E	NTRY HEAT T	RANSF	147B CONFIGURATIO	O*TO DI	ETERMINE TH	HE *1	HEAT-TRAN	S*6.0	-	*LARC	/	٠٠.	W. F	FOUST,RI	*DMS-DR	-2109
CF4	- *E	R TESTS OF	THE O	N ORBITER MODEL	(*EFFE	CTS OF THE	LO*		*6.0		*LARC	-	∗Ŕ.	E. 1	MIDDEN, LAR	C*JAN.,	1976
121-137	/*.	OOG-SCALE S	PACE 4	(50-0)	*W FRI	EON SPECIF	IC *		*		*FREON 1	TUNNEL	*J.	E. \	VAUGHN	*	
0H45		HUTTLE (-14			*HEAT	RATIO ON	THE*		*		*		*R.	н. !	LINDAHL	*	
CR-141.		BITER MODEL			*HEAT	ING DISTRI	3UT*		*		*		* - D	MS		*	
,) IN THE LA				AND TO DE			*		*		*	-		*	
	*R	ESEARCH CEN	ITER *	•	*MINE	THE IMPIN	GEM*		*		*		*			*	
		REON TUNNEL				OF THE ORB	-		*		*		*			*	
	* 4	CH 6 (0H45)) :	K		SHOCK ON			*		*		*			*	
	*			k	*E WI!		*		*		*		*			*	
	*				*		*		*		*		*			*	

			,					
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			147
· 								
EST ID	* * * REPORT TITLE	* CONFIGURATIONS * TESTED	* * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCAL *MACH RANG		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
	WEST TRANSFER T	FC. ODDITED CONFIGUR	COTITE ACCENT					
	*HEAT TRANSFER T	ES*ORBITER CONFIGUR	A*TO OBTAIN ASCENT		5*6.0 - *	*LARC / *LARC -	*D. G. WALSTAD/ R *CKWELL INTERNATI	
		PA*EXTERNAL TANK	*ONDITIONS SIMULA	_	*	*FREON TUNNEL	*NAL	U*UAN., 1970
,	*CE SHUTTLE	*	*ING REAL GAS	*	*	* TREON TOWNEL	*J. E. VAUGHN	*
	9+THERMOCOUPLE MO		*EFFECTS AT HYPER	S*	*	*	*M. M. MANN	
,	*L (41-0T) IN TH		*ONIC MACH NUMBER	-	*	*	*-DMS	*
	*LANGLEY RESEARC		*	*	*	*	*	*
	*CENTER FREON	*	*	*	*	*	*	*
	*TUNNEL AT M = 6		*	*	*	*	*	*
	*IH18)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
: -	*REENTRY AERODYN	AM*MODEL 449/CONF.N	B*TO EVALUATE STAT	I*FORCE	*0.563 /	*LARC /	*J. D. JOHNSON	*DMS-DR-2111
		IC*RE1, NBRE1A, NBR			*0.6 -	*MSFC -	*W. F. BRADDOCK/N	
-		UT*1B. NBRE1S1ELT			*4.96	*14-INCH TRISON	· · · · · · · · · · · · · · · · · · ·	*
iF ,	*TLE SOLID ROCKE		*	*	*	*IC WIND TUNNER		*
	*BOOSTER MODEL 4		*	*	*	*	*-DMS	*
,	*TESTED IN MSFC		*	*	*	*	*	*
	*4 X 14 INCH TWT		*	*	*	*	*	*
	*	*	*	*	*	*	*	*
	*AERODYNAMIC RES	UL*INTEGRATED VEHIC	*DETERMINE PROXIM	I * FORCE	*0.01 /	*ROCKWELL/	*J.J. DAILEDA/RI	*DMS-DR-2112
		EL*E (CONFIGURATION			*4.5 -	*AEDC -	*J. E. VAUGHN	*NOV., 1974
	*SEPARATION TEST	and the second s	*NTS FOR ORB.AND		*	*SUPERSONIC WIN		*
	*ON A O.O1-SCALE		*.T. AND SRB	 *	*	*D TUNNEL (A)		*
	*MODEL (32-OTS)		*W AND W/O SEPARA	T*	*	*	*	*
	*ACE SHUTTLE INT		*ION ROCKETS FIRI		*	*	*	*
	*RATED VEHICLE (*G.	*	*	*	*	*
	*57)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
-	*EFFECTS OF REAC	TI*VL70-000139	*OBTAIN DETAILED	E*FORCE	* 0.010 /	*LARC /	*T. A. BLACKSTOCK	*DMS-DR-2113
	*ON CONTROL SYST		*FFECTS ON SSV HY		*10.3 -	*LARC -	*/LARC - J. J. DA	
	*JET FLOW FIELD		*ERSONIC AERODYNAI		*10.3		O*LEDA, J. MARROQU	
; · · ·	*NTERACTIONS ON		*IC AND STABILITY		*	*W HYPERSONIC 1		- *
34,111	*E AERODYNAMIC C	HA*	*AND CONTROL CHAR		*	*UNNEL	*M. M. MOSER JR.	*
•	*RACTERISTICS OF		*CTERISTICS OF RS		*	*	*-DMS	*
	*O.010 SCALE SPA		*JET FLOW FIELD I		*	*	*	* 1
	*E SHUTTLE ORBIT		*NTERACTION WITH		*	*	*	*
	*MODEL IN THE LA		*HE LOCAL VEHICLE	•	*	* '	* 1	*
	*GLEY RESEARCH C		*FLOW FIELD.	*	*	* ;	*	*
	*TER 31-INCH CFH		*	*	*	*	*	*
	*	•	•				*	

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			WIND TU	NNEL TEST / DMS	DATA PROCESSI	NG		148
TEST	* * * REPORT TI	_		* TEST * TYP URPOSE * TE		* ALE* TESTING NGE* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
NRLAD LSWT 716 OA86 CR-134, ARC 3.5HWT 176 OA87 CR-134, NRLAD 7TWT 278	- *AERODYNAMIC - *TIGATIONS IN /*RIOUS LOW SF */D IMPROVEMI .O98*DEVICES ON TO *OA/B SPACE SE *E ORBITER CO *RATION IN TO *NAAL WIND TO *(DA86) * - *RESULTS OF - *IGATIONS ON /*15-SCALE MOD *9-0) OF THE .O85*SHUTTLE ORB. *IN THE NASA *3.5-FOOT HYI *IC WIND TUNI *A87) * - *EFFECT OF TI - *ENGINE AIR IO /*HING PROPULS	INVES*B30 THR NTO VA*8W116E2 PEED L* ENT * IHE 14* SHUTTL* DNFIGU* HE RI * JNNEL * INVEST*140A/B A O.O* DEL (4* SPACE* ITER * /AMES * PERSON* NEL (0* HE SIX*B19C7F5 BREAT *V7R5X20 SION S*RAKES	J B5OC9M7F*INVEST 6V8R5X9 *VARIOU *REDUCT *QUES I *ATTEMP *E L/O *TO CAL *G INTE *EFFECT * * *VERIFY *STABIL *NTROL *TICS, *ROL SU *TIVENE *STIGAT *NUMBER * * U59W107E23*EFFECT * *ULSION	IGATION OF *FORCE IS BASE DRAG* ION TECHNI * N AN * T TO IMPROV* RATIOS AND * CULATE STIN* RFERENCE * S * SUPERSONIC*FORCE ITY AND CO * CHARACTERIS* VERIFY CONT* RFACE EFFEC* ES AND INVE* E REYNOLDS * E FFECT * OF THREE A*FORCE ATHING PROP* SYSTEM FER*	* 0.0405 *0.2 - *0.2 * * * * * * * * * * * * * * * * * * *	/ *NRLAD / *NRLAD - *LOW SPEED W *TUNNEL * * * * * * * *ARC - *3.5-FOOT HY *SONIC WIND *NEL * * * * * * * * * * * * *	*R. C. MENNELL/R *D. A. SARVER IND*G. G. MCDONALD *-DMS * * ** *M. T. PETROZZI *D M. D. MILAM/R PER*KWELL INTERNATI TUN*AL *J. A. MELLENTHI *AMES RESEARCH C *TER *B. W. MYERS *-DMS * *H. C. SMITH /RI *D. A. SARVER ONI*G. G. MCDONALD	I *DMS-DR-2114 *JUNE, 1974 * * * * * * AN*DMS-DR-2115 OC*MARCH, 1974 ON* * * * * * * * * * * * *
OA91 CR-134	*YSTEM ON SPA *B88*SHUTTLE ORB *UBSONIC AND *ONIC STABIL *D CONTROL *CHARACTERIS *OA91) *	ITER S* TRANS* ITY AN* *	*CONFIG *TRANSO *ISE, E *TIVENE *LONG. *AND LA	STÁBILITY, * AT-DIR STAB * E -139B SHUT*	* * * * * * *	*C WIND TUNN * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	* * * * * * * *

					WIND	TUNNEL TEST	/	DMS DATA	PROCES	SSING						14
	*		*		*		*		*MODEL	 -	*		*	COGNIZANT	*	BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTIN	G	*	TEST DMS	*PU	BLICATION
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY		*	PERSONNEL	*0R	COMMENTS
LARÇ BVDHT		TRANSITION HEATI G RATES DETERMIN		22C7F5M4V7W111		FORMED TO DE [.] NE TRANSITIO		IEAT-TRAN	S* .00€ *8.0		*LARC *LARC	/		CUMMINGS/ROC		
64 8		D ON A O.OOG SCA				TING RATES U	-		*8.0 *8.0			- A D T A D I		L INTERNATION RAPARELLI/RO		PI., 197
046 0H14	-	E SPACE SHUTTLE				THIN SKIN			*0.0					LL INTERNATIO		
		ORBITER MODEL (N				RMOCOUPLES.	Ţ.		Ţ.		*RSONIC T			LL INTERNATIO	IVA T	
CK 141,		. 50-0) IN THE N			* 1116	KMUCUUFEES.	-		-		*	CIVINEL		G. MCDONALD	Ţ.	
		SA/LARC MACH 8 V					-		Ţ.		.		+-D		Ţ	
		RIABLE DENSITY			-				÷		+		+-0	M2	Ĵ	
		WIND TUNNEL TEST			-				Ţ		-		Ţ.		-	
		(0H14)			-				-		-		Ξ.		.	
	-	(Onta)	Ţ		-		-		Ϊ.		<u>.</u>		-		-	
LARC	- *	RESULTS OF TRANS	- ∩∗#/	TED INTERDATED	*1.00	S AND LAT -		ODCE	* ^ ^	5 /	*ROCKWELL	,	*0	HARDIN/ R. B	11D * DM	S-DD-2119
8TPT		NIC WIND TUNNEL						UNCE	*0.6		*LARC	_		WS- ROCKWELL		GUST. 197
667	-	ESTS ON AN 0.015		· · · · · · · · · · · · · · · · · · ·		ING CONFIG BU			*1.20			- DANSOI		E. VAUGHN	- AO	3031, 137
IA41		SCALE SPACE	*		*LD-1		*		*1.20					E. VAUGHN	*	
		SHUTTLE MATED VE				E ALSO IA42A,	/R*		*		*NNEL	OKE II	•-D. +-D		*	
OK 10-1,	_	ICLE MODEL(67-OT			-	RESULTS FOR			*		*		*	m3	*	
) IN THE LARC 8-	-			HER MACH NO.			*		*		*		*	
		OOT TPT (IA41)	*		*DAT		*		*		*		*		*	
	*	001 111 (1241)	*		*	٠,	*		*		*		*		*	
LARC	- *	SUPERSONIC TESTS	*00	NEIGURATION 4 N	!*TO (ORTAIN AFRON	/N*F	ORCE	*0.015	. /	*ROCKWELL	/	*P	HARDIN, R. B	HD*DM	S-DP-2119
JPWT		OF AN O.015-SCAL						JNOL	*1.6	•	*LARC	, -		WS/RI		GUST. 197
		SPACE SHUTTLE MA		20 331 (0, 013)	*	J TORGE DATA	*		*4.6			DIANI		A. SARVER	*	uosi, 157
I A 4 2 A		TED VEHICLE MODE			*		*		* 4.0		*IND TUNN			E. VAUGHN		
IA42B		(67-OTS) IN THE			*		-		-		* TIAD LOUIN		*-D			
		LARC UPWT TO OBT			-		_		.		*		+ - D	143	-	
JR 154,	-	IN AERODYNAMIC F			_		Ī		-		.		_		-	
		RCE DATA	J.		Ī				-		.		_		-	
	*	RCE DATA	•		-		Ĵ		-		•				-	
LARC	- *1	WIND TUNNEL TEST	c + no	DETTED	+5551	ECT OF SPEEDE		OBCE	* 0.01	E /	+D 7	,	***	W. SPARKS	*DM	S-DR-2120
BTPT		OF AN O.015-SCAL		BIILK		AND BODY FLA		UKCE	*O.35	-		-		M. MOSER JR.		N. 197
668	_	E CONFIGURATION			TANE	AND BODT FLA	17		* 1.2		*8-FOOT T				+ UA	14., 15/
DA 106		40A/B SPACE SHUT			-		-		- 1.2		*IC PRESS			MO		
		LE ORBITER MODEL			-				*		*NNEL	UKE II			*	
UN 104,		(67-0) IN THE NA			*		_		*		* IMAC F		-		*	
		A/LRC 8-FOOT TPT			*		-		•		*		-		*	
		TO OBTAIN TRANSO					*		*		*		*	1:	*	
		IC AERODYNAMIC F		the state of the state of	*		*		*		*		*		*	
		RCE DATA (DA 106)			*		*		*		*		±	•	*	
		DAIA (OA 100)			-		-		•		•		-		-	

				WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING							150
	*	*		*				*MODEL		*			 *	COGNIZANT	* BA	SIC
TEST	*	*	CONFIGURATIONS	*	TEST	*	TYPE OF			E* 1	ESTING		* 7	EST DMS		CATIONS
ID	* REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	E* #	GENCY		*	PERSONNEL	*OR CO	DMMENTS
ARC	- *TRANSONIC AEROD	YN*TA	SK CANCELLED.	J*TEST	CANCELLED.	J∗F	ORCE	* 0.01	5 /	*LAF	2C /		*W.P.	PHILLIPS	*DMS-D	R-2121
ΓΡ̈́Τ	- *AMIC INVESTIGAT					*		*0.35						FREEMAN.		
69	/*N OF CONFIGURAT		,	*		*		*1.2		*8-F	OOT TR	ANSON	*V. V	. SPARKS	*CANCE	LLED
A88	*N MODIFICATIONS			*		*		*		*IC	PRESSU	RE TU	*V. V	. SPARKS	*JULY.	197
	*TO RI-140A/B FO			*		*		*		*NN!		_	*-DM		*	
	*EXTENDING CENTE			*		*		*		*	-		*	-	*	
	*DF GRAVITY RANG			*		*		*		*			*		*	
	*	*		*		*		*		*			*		*	
RLAD	- *INVESTIGATION C)F *1 4	LINCH CONFIGURA	T*OUAL	TEV A NEW E	XT*F	PRESSURE	*0.015	1	*RI	1		*R.L.	. ROGGE / I	ROCK*DMS-E	DR-2122
TWT	- *SPACE SHUTTLE L							*1.1	•		AD -			INTERNAT		
30	/*NCH VEHICLE EXT		(obile of ot		GURATION	*	0,,,,,	*1.2			OOT TR				*	
A69	*NAL TANK NOSE O			*	40	*		*						A. SARVER	*	
	424*FIGURATION EFFE			*		*		*		*				. SPARKS	*	
	*S (MODEL 67-OTS			*		*		*		*			*-DM		*	
	*IN THE ROCKWELL			*		*		*		*			*	_	*	
	*NTERNATIONAL 7-			*		*		*		*			*		*	
	*Y 7-FOOT TRISON	_		*		*		*		*			*		*	
	*WIND TUNNEL (IA			*		*		*		*			*		*	
	*9)	*		*		*		*		*			*		*	
	*	*		*		*		*		*			*		*	
SFC	- *RESULTS FROM IN	JVF*I	LUNCH CONFIGURA	T*DETE	RMINE FFFFC	T *F	PRESSURE	* 0.00	4 /	*R.	τ. /		*W. (GARTON / R	OCKW*DMS-	DR-2123
4TWT	- *STIGATIONS IN 1				AS SUPPLY S			*0.9		*MS				INTERNATI	-	
88	/*NASA/MSFC TWT (*2.99			_		_	. SPARKS	*	
A53	*A 0.004 SCALE N					*		*						. SPARKS	*	
	504*DEL SPACE SHUTT	-		_		NV*		*		*			* - DM		*	
,	*LAUNCH VEHICLE							*		*			*		*	
	*MODEL 13P-OTS)							*		*			*		*	
	*DETERMINE GAS			*VEHI		*		*		*			*		*	
	*PPLY STRUT EFF	_		*		*		*		*			*		*	
	*ON MODEL PRESSU			*		*		*		*			*		*	
	*E ENVIRONMENT			*		*		*		*			*		*	
	*53)	*		*		*		*		*			*		*	
	*	*		*		*		*		*			*		*	

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						. 		
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING	3		
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS	s * TEST	* TYPE OF	* SCAL	E* TESTING	* TEST DMS	*PUBLICATION
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	SE* AGENCY	* PERSONNEL	*OR COMMEN
ARC		•	CO*DETERMINE SURFACE		*1.0 /	/ *ARC -	*R. H. SPANGLER	_
3.5HWT	- *0A26 AND IA16 I		*STATIC PRESSURE		*5.3 -		PER*D D. E. THORNTO	
180			A*DISTRIBUTIONS ON		*10.3		TUN*ROCKWELL INTER	NAT*
IA16			/*THE ORBITER FUSE		*	*NEL	*IONAL	*
0A26	*WIND TUNNEL ON A		*AGE, FOR BOTH THE		*	*	*B. W. MYERS	*
CR-134,0	093*0.015 SCALE MODE		*ASCENT AND ENTRY		*	*	*-DMS	*
	*(36-OTS) OF THE		*FLIGHT PHASES, E		*	*	*	*
	*SPACE CONFIGURAT		*O SUPPORT ORBITES	<*	* -	*	*	*
	*ON 140A/B TO 0B3 *IN PRESSURES FOR		*VENTING STUDIES	*	*	*	*	*
	*VENTING ANALYSIS		- -	-	<u>.</u>	*		*
	*VENIING ANALYSIS	<i>y</i>	*	*		-	*	*
LARC'			A*TO DETERMINE HYP	* E000E	*0.004 /	′ *R/I /	*DAVID R. STONE	/N+DMC-DD-21/
22HT	- *ITY AND CONTROL		*RSONIC STABILITY		*18.1 -	*LARC -	*ASA-LARC	*SEPT 19
422) * AND CONTROL CHAR		*21.6		IUM*P. HAWTHORNE /F	
0A88	*D REYNOLDS NUMBE		*CTERISTICS AND	*	*	*TUNNEL	*J. E. VAUGHN	*
	109 * EFFECTS OF THE F		*REYNOLDS NUMBER I	<u>-</u> *	*	*	*J. E. VAUGHN	*
	*CKWELL SSV 140 A		*FFECT ON ROCKWELL		*	*	*-DMS	*
	*B ORBITER CONFIG		*-140 A/B ORBITER		*	*	*	*
	*RATION	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
LARC	- *EFFECTS OF REACT	TI*TASK CANCELLED.	D*TEST CANCELLED. I)*FORCE	* 0.01 /	*LARC ~	*TOM BLACKSTOCK	/N*DMS-DR-212
CFHT	- *ON CONTROL SYSTE	M*EC., 1976	*ECEMBER 1976	*	*10.3 -	*CONTINUOUS-	FLO*ASA-LARC	*TASK
100	/*JET SIMULATION () *	*	*	*10.3	*W HYPERSONI	C T*J. E. VAUGHN	*CANCELLED
LA25	*N THE HYPERSONIC	*	*	*	*	*UNNEL	∗J. E. VAUGHN	*DEC., 19
	*PERFORMANCE, STA	∤B *	*	*	*	*	*-DMS	*
	ILITY AND CONTRO	OL	*	*	*	*	*	*
	*CHARACTERISTICS	*	*	*	*	*	*	*
	*OF A .O1 SCALE	*	*	*	*	*	*	*
	*ROCKWELL INTERNA		*	*	*	*	*	*
	*IONAL 139B ORBIT		*	*	*	*	*	*
	*R CONFIGURATION	*	*	*	*	*	*	*
400	* *************************************	*	*	*	*	*	*	*
LARC			I * EFFECT OF REYNOLD			*LARC /	*PETER T. BERNOT	
CFHT	_		O*S NUMBER ON ORBIT		*10.3 -	*LARC -	*J. E. VAUGHN	*JULY, 19
102 LA35	/*MBER 10.3 ON AEF	COAL DELIECTIONS	*ER AERO. CHARACTE	: *	*10.3	_	FLO*J. E. VAUGHN	*
LA35 TM-X	*DYNAMIC	T	*RISTICS	Ŧ	-	*W HYPERSONI	C I+-DM2	#
71954	*CHARACTERISTICS *F .O1 SCALE 139-		∓ •	+	*	*UNNEL	I	# _
/ 1534	*P .OT SCALE 139-	- D +		-	-	-	∓	# _
	TUKDITEK	.	*	Ŧ	# 	∓	∓	∓
	T					_		

							WIND	TUNNEL TES	ST /	DMS DATA	PROCES	SSING	•				152
	*			*			 *		*		*MODEL		*		*	COGNIZANT	* BASIC
TEST	*			*	CONFIGUR	RATIONS	*	TEST	*	TYPE OF			* TES	TING	*	TEST DMS	*PUBLICATIONS
ID	*	REPOR	T TITLE	E *	TEST	ED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGE	NCY	*	PERSONNEL	*OR COMMENTS
RC	- *T	NVESTI	GATIONS	S (1)N+1	IAOA /B		*THE	PRIMARY 1	rect*e	ODCE	*0.03	,	*ARC	,	*M^	DK E NICHOL	S /*DMS-DR-2128
			O-SCALE		1404/6			CTIVES ARE		OKOL	*0.6	•	*ARC		*RI		*VOLUME 01
47			UTTLE \					TAIN CONF			*1.2			OT TRA		M. MANN	*AUGUST, 1974
A53A	-		FIGURAT					N 140 A/B			*			IND TU			*
R-134,1								ILITY AND			*			IITARY)			*
, .			THE AMI				_	CHARACTE			*		*		*		*
			CENTER					CONTROL S			*		*		*		*
			OT SUP				-	EFFECTIVE			*		*		*		*
			IND TU					ROL SURFAC			*		*		*		*
	*(OA53A)		*			*INGE	MOMENTS.	AND*		*		*		*		*
	*	•		*				ICAL TAIL			*		*		*		*
	*			*				LOADS.	*		*		*		*		*
	*			*			*		*		*		*		*		*
RC:	- *I	NVESTI	GATIONS	S 0N*1	140A/B		*THE	PRIMARY TI	EST *F	ORCE	*0.03	/	*ARC	/	*M#	RK E. NICHOL	S /*DMS-DR-2128
			O-SCALI					CTIVES ARI			*0.6	- '	*ARC	-	*R1		*VOLUME 02
47			UTTLE					TAIN CONF			*1.2		*11-F0	OT TRA	NSO*M.	M. MANN	*AUGUST, 1974
A53A	*C	LE CON	FIGURA	TION*			*ATIO	N 140A/B	*		*		*NIC V	IND TU	INNE * - E	MS	*
R-134,1	15+1	40A/B	ORBITE	R MO*			*STAB	ILITY AND	CON*		*		*L (U)	IITARY)	*		*
-	*D	EL IN	THE AMI	ES R*			*TROL	CHARACTE	RIST*		*		*		*		*
	E	SEARCH	CENTE	R 11			*ICS.	CONTROL S	SURF*		*		*		*		*
	~	BY11-F	OOT SU	PER-			*ACE	EFFECTIVE	NESS*		*		*		*		*
	S	ONIC W	IND TU	NNEL			*CONT	ROL SURFA	CE H*		*		*		*		*
	*(OA53A)		*			* INGE	MOMENTS,	AND *		*		*		*		*
	*			*			*VERT	ICAL TAIL	PAN*		*		*		*		*
	*			*			*EL L	OADS.	*		*		*		*		*
	*			*			*		*		*		*		*		*
RC	- *A	IRLOAD	S INVE	STIG*S	SSV 140A/E	LAUNCH	*OBTA	IN PRESSU	RE D*F	RESSURE	* 0.0	30 /	*ARC	/	*R.	L. GILLENS	/ R*DMS-DR-2129
7SWT	- *A	TION O	F AN O	.030*			*ISTR	IBUTIONS (ON I*F	ORCE	*1.55	-	*ARC	-		CKWELL	*VOLUME O1
16	/*-	SCALE	MODEL (OF T*			*NTEG	RATED LAU	NCH *		*2.2		*9-F00	OT BY 7	7-F0*E.	. CHEE / ROCK	(WEL+MAY, 197!
A 14B	*H	E SPAC	E SHUT	TLE *			*VEHI	CLE. FORCE	E DA*		*		*OT SI	JPERSON	IIC *L		*
R-141,5	322*V	EHICLE	1404/	B LA*			*TA W	ERE TAKEN	ALS*		*		*WIND	TUNNEL	_ (U*D	. A. SARVER	*
	*U	NCH CO	NFIGUR	*OITA			*0.		*		*		*NITA	₹Y)	.ل∗	T.DAVIET	*
	*N	(MODE	L 47-0	TS) *			*		*		*		*		*-[DMS	*
	* I	N THE	ARC 9~	BY *			*		*		*		*		*		*
	7	-F00T	UNITAR	Y PL			*		*		*		*		*		*
			TUNNE				*		*		*		*		*		*
			1.55 A	ND 2*			*		*		*		*		*	•	*
	*.	2 (IA1	4B)	*			*		*		*		*		*	İ	*
	*			*			*		*		*		*		*	•	*

					,	*			,
• • • • • • •			WIN	D TUNNEL TEST	/ DMS DATA	PROCESSING			153
TEST	* * * REPORT		* ONFIGURATIONS * TESTED *	TEST PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
C SWT	- *ATION OF /*-SCALE MO	AN O.O3O* Del of T*	*NT	TRIBUTIONS ON EGRATED LAUNCH	I*FORCE *	*2.2	*ARC - *9-FOOT BY 7-FO	*R. L. GILLINS / *DCKWELL D*E. CHEE / ROCKWE	*VOLUME O2
A14B R-141,	*HE SPACE 323*VEHICLE 1	140A/B LA*	*TA	HICLE. FORCE D WERE TAKEN AL		*	*OT SUPERSONIC *WIND TUNNEL (U	J*D. A. SARVER	*
	*UNCH CONF *N (MODEL *IN THE AR	47-0TS) *	*0. * *		*	* *	*NITARY) * *	*J.T.DAVIET *-DMS	* *
	7-FOOT UN	NITARY PL	*		*	*	*	*	*
	*R MACH 1. *.2 (IA148		*		*	*	* *	*	*
RC 1TWT 16 A22A	- *ATION OF /*-SCALE MO	AN 0.030*R DEL OF T*	*RB	TRIBUTIONS ON ITER ALONE. F	O*PRESSURE	*0.6 ~ *0.9		* *R. L. GILLENS / *OCKWELL)*F. CHEE / ROCKWE	*MAY, 1975
	HE SPACE 1 29*VEHICLE : BITER CON	140A/B OR*		E DATA WERE SO TAKEN.	*		*NIC WIND TUNNE *L (UNITARY) *	*D. A. SARVER *J.T.DAVIET	* *
	*ON (MODEL *N THE ARC *UNITARY P	11-F00T*	*		*	*	* *	*-DMS *	*
	*D TUNNEL *O.6 AND O	FOR MACH*	*		*	* *	* *	* .	* * *
	*2A)	*	*		*	*	* *	*	*
RC 7SWT 16 122B	- *ATION OF /*-SCALE MO	AN O.O3O*TER DEL OF T*	*RB	TRIBUTIONS ON ITER ALONE. F	O*FORCE	*1.55 - *2.2		*R. L. GILLENS / *OCKWELL)*F. CHEE / ROCKWE	*MAY, 1975
	*HE SPACE 30*140A/B OR *NFIGURATI	RBITER CO* CON (MODE*		E DATA WERE SO TAKEN	*	*	*OT SUPERSONIC *WIND TUNNEL (L *NITARY)	J*D. A. SARVER *J.T.DAVIET	* *
	*L 47-0) I *C 9- BY 7 *ITARY PLA	'-FOOT UN* N WIND T*	* * *		* *	* * *	* *	*-DMS * *	* * *
	*UNNEL FOR *55 AND 2. *)		*		*	*	*	* 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	*

					·										
TECT	*		*	CONCTOURATIONS	*	TECT	*	DF 05	*MODEL	-	*	*	COGNIZANT	_	SIC
TEST	*	REPORT T	* TTIF *	CONFIGURATIONS TESTED	*	TEST PURPOSE	* IY	PE OF			* TESTING * AGENCY	*	TEST DMS PERSONNEL		CATION
					. 										
EDC	- *	RESULTS OF	DYNAMT * -	O89B W/MOD NOSE	*HYPF	RSONIC DYNA	MI*FORC	F	*0.012	, ,	*LARC /	*DF	LMAR FREEMAN	/L∆∗DMS-D	R-2132
WTB		C STABILIT		000B #/ MOD 1100E		ABILITY	*	_	*8.0	•	*AEDC -	*RC	_ ,	*MAY.	
8A	/*	CONDUCTED	ON A . *		*		*		*8.0		*HYPERSONIC W	IN*J.	E. VAUGHN	*	
A42	*	012 SCALE I	MODIFIE*		*		*		*		*D TUNNEL (B)	*J.	T.DAVIET	*	
R-141,	535*	D 089 B SH	UTTLE O*		*		*		*		*	*-D	MS	*	
	*	RBITER IN	THE AED*		*		*		*		*	*		*	
	*	C-VKF TUNN	EL B AT*		*		*		*		*	*		*	
	*	A MACH NUM	BER OF *		*		*		*		*	*		*	
	*	8.0 (LA42)	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
ARC		RESULTS OF				IN HYPERSON		E	*0.010		*LARC /		E. THORNTON,		
FHT			•	XTERNAL TANK	-	BILITY DATA			*10.3		*LARC -		BLACKSTOCK ,	/ N*JULY,	197
07		31-INCH CF				RBITER - EXT			*10.3		*CONTINUOUS-F			*	
A58		N 0.010-SC				TANK WITH A			*		*W HYPERSONIC			*	
R-134,		EL (32-0T)				OUT PLUME A	ND*		*		*UNNEL		W. SPARKS	*	
		SPACE SHUT			*BEAN	1	*		*		*	*-D	MS	*	
		NFIGURATIO			*		*		*		*	*		*	
		OBTAIN HYP			*		*		*		*	*		*	
		AERODYNAMI			*		*		*		*	*		*	
		ACTERISTIC			*		*		* -		*	*		*	
		ECOND STAG TION DURIN			*		*		.		*	- -		*	
		AL BOOST A			*		*		-		* •	-		*	
		ABORT RTLS			* *		*		* •		. i	.		*	
		ADURI KILS	MUDE *		*		*		<u>.</u>		* '	-		*	
EDC		DECIII TC 05	**************************************	RBITER -140A/B	・キロヘシュ	DECNIE CTAR	***************	·E	*0.015	= /	*ROCKWELL/	*D	L. GILLINS/R	00K*DNC-L	10-2124
WTB		IGATIONS (AND CONTROL		E	*6.0	•	*AEDC -	*WE			SION 01
A474		D 0A78) ON		JAI 1G.		ROL SURFACE	_		*0.	-	*HYPERSONIC W			*JAN	
WTC		15-SCALE 1				CTIVENESS	*		*		*D TUNNEL (B)				, ,,,,
A77		ONFIGURATI				NOLDS NUMBER			*		*HYPERSONIC W			*	
A78		E SHUTTLE			*FFE		*		*		*D TUNNEL (C)			*	
–		ORBITER MO			*	- · -	*		*		*	*		*	
		-O IN THE			*		*		*		*	*		*	
		F B AND C			*		*		*		*	*		*	
		NNELS	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	

		WIND TUNNEL TEST				ODONITANT	. BACTO
TEST *	* * CONFIGURATION:	* S * TEST	* * TYPE OF	*MODEL	.E* TESTING	* COGNIZANT * TEST DMS	* BASIC *PUBLICATIONS
ID * REPORT TITLE	* TESTED	* PURPOSE	* TEST		E* AGENCY	* PERSONNEL	*OR COMMENTS
C - *	*TASK CANCELLED	A*TEST CANGELLED.	A * EODCE	*10.3 -	*NASA /	*T. BLACKSTOCK /N	A *DMS_DD_2125
у Г - *	*UGUST. 1974	*UGUST 1974	*	*		*SA-LARC	*TASK
/*	*	*	*	*	*CONTINUOUS-FLO		*CANCELLED
3 • ∗	*	*	*	*	*W HYPERSONIC T	*J. E. VAUGHN	*AUGUST, 1974
. *	*	*	*	*	*UNNEL	*-DMS	*
*	*	*	*	*	*	*	*
- *RESULTS OF HEAT						*T.F. FOSTER, W.H.	
HWT - *RANSFER TESTS OF /*AN O.O175-SCALE		*TE DATA FOR THE		*5.3 -		*DYE/RI	*VOLUME O1
/*AN O.O175-SCALE : *PACE SHUTTLE VEH		*IRST AND SECOND		*5.3 *		I*W.K. LOCKMAN.H.L I*SEEGMILLER/NASA	
141.514+CLE MODEL 22 OTS		*TO INVESTIGATE		*	*NEL	*AMES	*
The state of the s		3*NTERFERENCE HEA		*	*	*B. J. FRICKEN	*
3.5-FOOT HYPERSO			·-	*	*	*-DMS	*
*IC WIND TUNNEL	*	*	*	*	*	*	*
*(1H3)	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*
- *RESULTS OF HEAT				,		*T.F. FOSTER, W.H.	
HWT - *RANSFER TESTS OF		*TE DATA FOR THE		*5.3 -		*DYE/RI	*VOLUME O2
/*AN O.O175-SCALE S *PACE SHUTTLE VEH		IRST AND SECOND* STAGE VEHICLES A	-	* 5.3		!*W.K. LOCKMAN,H.L !*SEEGMILLER/NASA	
141.515*CLE MODEL 22 DTS		*TO INVESTIGATE		*		*AMES	*
*IN THE NASA-AMES	-	*NTERFERENCE HEAT		*	*	*B. J. FRICKEN	*
*3.5-FOOT HYPERSOI		*NG EFFECTS	*	*	*	*-DMS	*
*IC WIND TUNNEL		*	*	*	*	*	*
*(IH3)	*	*	*	*	*	*	*
*	*	*	*	*	*	*	*
- *RESULTS OF HEAT						*T.F. FOSTER, W.H.	
HWT - *RANSFER TESTS OF				*5.3 -		*DYE/RI	*AOTINE 03
/*AN 0.0175-SCALE		*IRST AND SECOND		*5.3		*W.K. LOCKMAN,H.L	
*PACE SHUTTLE VEH 141,516*CLE MODEL 22 DTS		3*TAGE VEHICLES AI TO INVESTIGATE		*		*SEEGMILLER/NASA *AMES	*
		3*NTERFERENCE HEA		*		*B. J. FRICKEN	*
*3.5-FOOT HYPERSON			*	*		*-DMS	*
*IC WIND TUNNEL		*	*	*	*	*	*
*(IH3)	*	*	*	*	*	*	*
r Property (1997)	*	*	*	*	*	* 144	*
The second secon	4						
	1 1		1 : 1				
	1		•				

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			GNIW	TUNNEL TEST	/ DI	AS DATA	PROCESSI	NG					156
	*	*	*		*		*MODEL		*	*	COGNIZANT	* BAS	C
TEST	*	* CONFI	GURATIONS *	TEST	*.]	YPE OF	* SC	CALE	* TESTING	* 1	EST DMS	*PUBLICA	
ID	* REPORT TITLE	* TI	ESTED *	PURPOSE	*	TEST	*MACH RA	NGE *	* AGENCY	*	PERSONNEL	*OR COM	MENTS
							·						
	- *RESULTS OF HEAT					T-TRANS					FOSTER, W.H.		
	- *RANSFER TESTS OF			DATA FOR THE			*5.3 -			*DYE/		*VOLUME	
78	/*AN 0.0175-SCALE	_		T AND SECOND	-		*5.3		*3.5-F00T HYPER				1976
H3	*PACE SHUTTLE VEH	I*B17 C7	M4 F5 W1O3∗TAG	E VEHICLES A	1D *		*		*SONIC WIND TUN		•	*	
R-141,5	117+CLE MODEL 22 OTS	*E22 V7	R5 T10 +T0	INVESTIGATE :	*		*	,	*NEL	*AMES	-	*	
	IN THE NASA-AMES				1		*	,	*		J. FRICKEN	*	
	*3.5-FOOT HYPERSO	N*E22 V7	R5 T10 S8 *NG	EFFECTS	*		*	,	*	*-DMS	5	*	
		*	*		*		*	1	*	*		*	
	*(IH3)	*	*		*		*	1	*	*		*	
	*	*	*		*		*		*	*		*	-
	- *RESULTS OF TESTS		•			RCE	* 0.01	•	*NASA/NR /		. THORNTON /R		
	- *IN THE NASA/LARC		-	RCS JET FLOW			*10.33-				. POUCHER	*VOLUME	-
80	/*31-INCH CFHT ON	Δ*		LD ON HYPERS			*10.33		*CONTINUOUS-FLO		5	*REVISI	_
A60	* O.O1-SCALE	*	*IC	STABILITY AN	* (*		*W HYPERSONIC 1	*		*SEPT.,	1974
R-134,1	103*MODEL (32-0T) DF	*	*C01	ITROL	*		*		*UNNEL	*		*	
	THE SPACE SHUTTL	E	*		*		*		*	*		*	
	*CONFIGURATION 3	*	*		*		*		*	*		*	
	*TO DETERMINE THE	*	*		*		*		*	*		*	
	RCS JET FLOWFIEL	D	*		*		*		*	*		*	
	*INTERACTION EFFE	*	*		*		*		*	*		*	
	*CTS ON AERODYNAM	I *	*		*		*		*	*		*	
	C CHARACTERISTIC	S	*		*		*		*	*		*	
	(IA60/DA105) VJL	U	*		*		*		*	*		*	
	*ME 1 OF 2	*	*		*		*		*	*		*	
	*	*	*		*		*		*	*		*	
ARC	- *RESULTS OF TESTS	*CONFIGU	RATION3, M*DET	ERMINE EFFEC	TS*F0	RCE	* 0.01	/	*NASA/NR /	*D.E	. THORNTON /R	I∗DMS-DR	-2137
FHT	- *IN THE NASA/LARC	*0DEL 32	-0 *0F	RCS JET FLOW	*		*10.33-		*LARC -	*D. I	E. POUCHER	*VOLUME	02
09	/*31-INCH CFHT ON	A *	*FI	LD ON HYPERS	*NC		*10.33		*CONTINUOUS-FLO) * - DM	S	∗JULY,	1974
A 105	* O.O1-SCALE	*	*IC	STABILITY AN) *		*		*W HYPERSONIC 1	Γ*		*	
R-134,1	106*MODEL (32-OT) OF	*	*C01	ITROL	*		*		*UNNEL	*		*	
	THE SPACE SHUTTL	E	*		*		*		*	*		*	
	*CONFIGURATION 3	*	*		*		*		*	*		*	
	*TO DETERMINE THE	*	*		*		*		*	*		*	
	RCS JET FLOWFIEL	D	*		*		*		*	*		*	
	*INTERACTION EFFE	*	*		*		*		*	*		*	
	*CTS ON AERODYNAM	I *	*		*		*		*	*	1:	*	
	C CHARACTERISTIC	S	*		*		*		*	*	1.11	*	
	*(IA60/UA105)	*	*		*		*		*	*	ri 1	*	
					*		*		*	*	[]	*	

		- 																	
TEST	,			*	CO	NFIGURATIONS	*	TEST	*	TYPE OF	*MODEL	Scale	* * TEST	ING	*	COGNIZANT TEST DMS	* *PH	BASIC BLICAT	
ID		R	EPORT TITL	E *		TESTED	*	PURPOSE	*	TEST			* AGENO		*	PERSONNEL		COMME	
400		4.50	011547410/0									,		,			<i>.</i>		
.ARC JPWT						O-SCALE VERS: F THE VEHICL!				RESSURE	*0.010	•	*LARC *LARC	_		.SPENCER,JR R.B. KINGS			
059						ACE SHUTTLE					*4.6		*UNITARY	PLAN			AM*		197
H4	-		VERSION O					ATION, ORBITE	_		*		*IND TUN			H. LINDAHL	*	• •	
R-144.			EHICLE 3 S					NE, EXTERNAL			*		*		*-D!		*		
	,	SHU	TTLE CONFI	GJR +			*NK	ALONE, AND SC	LI*		*		*		*		*		
	,	ITA	ON(26-OTS)	IN *			*D R	DCKET BOOSTE	R *		*		*		*		*		
			LANGLEY R					NE; ALSO TO			*		*		*		*		
			CENTER 4-					N HEAT TRANS	FE*		*		*		*		*		
			D TUNNEL(I	-			*R D	ATA	*		*		*		*		*		
400			01154554066	*			*		*		*	. ,	*	,	*		*		
.ARC JPWT						O-SCALE VERS				RESSURE	*0.010	•	*LARC	/		SPENCER, JR.			
059						F THE VEHICLI ACE SHUTTLE					*2.36 *4.6	-	*LARC	. 5. 44		, R.B. KINGS			
H4	•		VERSION O			-		LAUNCH CUNF ATION, ORBITE			*4.6		*UNITARY *IND TUN			H. LINDAHL	*00	LY	197
			EHICLE 3 S		OINE	IGORATION		NE.EXTERNAL			*		* IND 101	NIAC F	*-DI		Ţ		
,,			TTLE CONFI					ALONE AND SO			*		*		*	13	*		
		-	ON(26-OTS)					CKET BOOSTE			*		*		*		*		
			LANGLEY R					NE: ALSO TO			*		*		*		*		
	*	RCH	CENTER 4-	FOOT*				HEAT TRANS			*		*		*		*		
	,	WIN	D TUNNEL(I	H4) *			*R D/	ATA	*		*		*		*		*		
	2			*			*		*		*		*		*		*		
ARC						O-SCALE VERS				RESSURE	*0.010		*LARC	/		SPENCER, JR.	•		
IPWT						F THE VEHICLE					*2.36	-	*LARC	-		, R.B. KINGS			
059						ACE SHUTTLE					*4.6		*UNITARY				* JU	LY,	197
H4			VERSION O		ONF	IGURATION		ATION, ORBITE			*		*IND TUN	INEL		H. LINDAHL	*		
K-144,			EHICLE 3 S TTLE CONFI					NE,EXTERNAL ALONE.AND SO			*		*		* -DN	15	*		
		_	ON(26-OTS)					CKET BOOSTE			-		*		-		-		
			LANGLEY R					NE: ALSO TO			*		*		*		Ţ.		
			CENTER 4-					N HEAT TRANS			*		*		*		*		
			D TUNNEL (I				*R D		*		*		*		*		*		
	*			*			*		*		*		*		*		*		
																,			
•						1													
																!			

		WIND TUNNEL T	EST / DMS DATA	PROCESSING			158
	* *	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST					* TESTING	* TEST DMS	
ID	* REPORT TITLE * TESTED	* PURPOSE	* TEST	*MACH RANGE	* AGENCY	* PERSONNEL	*OR COMMENTS
						in openoen in /	
LARC UPWT	<pre>- *AEROHEATING(PRESS*O.O10~SCALE V - *URE) CHARACTERIST*ON OF THE VEH</pre>			*0.010 / *2.36 -	*LARC / *LARC -	*B. SPENCER, JR./ *RC. R.B. KINGSL	
1059	/*ICS OF A O.010-SC*3 SPACE SHUTT			*4.6	*UNITARY PLAN		*JULY. 1976
IH4	*ALE VERSION OF TH*CONFIGURATION			*	*IND TUNNEL	*R. H. LINDAHL	*
	611*E VEHICLE 3 SPACE*	*ALONE . EXTERN		*	*	*-DMS	*
J. 144,	*SHUTTLE CONFIGUR *	*NK ALONE AND		*	*	*	*
	*ATION(26-OTS) IN *	*D ROCKET BOO		*	*	*	*
	THE LANGLEY RESEA	*ALONE: ALSO		*	*	*	*
	RCH CENTER 4-FOOT	*TAIN HEAT TE		*	*	*	* •
	*WIND TUNNEL(IH4) *	*R DATA	*	*	*	*	*
	* *	*	*	*	*	*	*
NRLAD	- *EFFECT OF ELEVON *VL70-000140A/	B. M*ESTABLISH E	FECT *FORCE	* 0.0405 /	*RI /	*TERRANCE HUGHES	/*DMS-DR-2139
LSWT	- *GAP CONFIGURATION*ODEL 43-0	*OF NEW ELEVO		*0.20 -	*NRLAD -	*RI	*OCT., 1974
724	/*S ON THE LONGITUD*	*CONFIG. ON I		*0.26	*LOW SPEED WI	ND+D. E. POUCHER	*
OA118	*INAL AND LATERAL/*	*TUDINAL AND		*	*TUNNEL	*-DMS	*
CR-134.	407*DIRECTIONAL STABI*	*DIRECT STAB		*	*	*	*
•	*LITY AND CONTROL *	*AND CONTROL		*	*	*	*
	*EFFECTIVENESS OF *	*TIVENESS, MO	DEL 4*	*	*	*	*
	*THE 43-0 SPACE *	*3-0	*	*	*	*	*
	*SHUTTLE ORBITER *	*	*	*	*	*	*
	*(IA60/OA105) *	*	*	*	*	*	*
	* *	*	*	*	*	*	*
NRLAD	- *INVESTIGATION OF *140 A/B SPACE	SHU*ESTABLISH BA	ASIC L*FORCE	* 0.030 /	*ROCKWELL/	*TERRANCE HUGHES	/R*DMS-DR-2140
LSWT	- *SPACE SHUTTLE ORB*TTLE ORBITER	*ONGITUDINAL	AND L*	*0.26 -	*NRLAD -	*OCKWELL INTERNA	TI*SEPT., 1974
719	/*ITER SUBSONIC STA*	*ATERAL-DIRE	CTIONA*	*0.26	*LOW SPEED WI	ND*ONAL	*
DA37	*BILITY AND *	*L STABILITY	AND *	*	*TUNNEL	*W.M. ZEMAN/ROCK	(WE*
CR-134,	408*CONTROL CHARACTER*	*CONTROL CHAI	RACTER*	*	*	*LL INTERNATIONA	L *
	ISTICS AND DETERM	*ISTICS FOR	ΓHE BA∗	*	*	*D. A. SARVER	*
	INATION OF CONTRO	*SIC CONFIGU	RATION*	*	*	*G. G. MCDONALD	*
	*L SURFACE HINGE *	*PLUS CONTRO	*	*	*	*-DMS	*
	MOMENTS IN THE RO	*SURFACE HIN	GE MOM*	*	*	*	*
	CKWELL INTERNATIO	*ENTS	*	*	*	*	*
	NAL LOW SPEED WIN	*	*	*	*	*	*
	*D TUNNEL (OA37) *	*	*	*	*	*	*
	* *	*	*	*	*	*	*
						* 4.00	
						1	
					•	l.	

						WIND	TUNNEL TEST	T / I	OMS DATA	PROCES	SSING						15
	*			*		*		*		*MODEL		*		*	COGNIZANT	* B	ASIC
TEST	*			* (CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TEST	FING	*	TEST DMS	*PUBL	ICATION
ID	+	REPORT	TITLE 	*	TESTED	* 	PURPOSE	*	TEST	*MACH	RANGE	* AGE	VCY	*	PERSONNEL	*OR C	OMMENTS
															_		
EDC WTB		RESULTS O Of A ROCK			DEL NO. 29-0/VL				AT-TRANS	\$*0.017 *10.5	•		/		QUAN/RI		DR-2141
W15 A354		ERNATIONA					BER EFFECTS TO OBTAIN OV			*10.5	-	*AEDC	- CONTO WITH		BOUDREAUX/AR B. MEINDERS	O *JUNE	, 197
H11	-	SHUTTLE O					HEATING RAT			T 14			NEL (B)			<u>.</u>	
		- 139 CONF					AT MACH NE			-		*	VEL (B)	+ - Dh	13	-	
N 171,		N) 0.0175					FROM 10.5 T			*		*		_		Ţ.	
		DDEL (NO.				*16	1 KOM 10.3 I	*		*		*		*		*	
		THE AEDC				*		*		*		*		*		*	
		F TO DETE				*		*		*		*		*		*	
		PERSONIC				*		*		*		*		*		*	:
		EFFECTS (*		*		*		*		*		*		*	
	*	•		*		*		*		*		*		*		*	
SFC	- *	DETERMINA	TION OF	*TI	TAN III C SRM	*STAT	IC STABILIT	ry *F0	DRCE	*.0073	36 /	*NASA	/	*PAL	JL RAMSEY/ NA	SA * DMS -	DR-2142
4TWT		AERODYNAM					DRAG ON TIT			*0.6	-	*MSFC	-	*MSF			ST. 19
87	/*	LITY AND	DRAG OF	*		*SRM	AT HIGH AND	≩L *		*4.96		*14-IN	H TRISO!	۱*۷.	W. SPARKS	*	
A4	*	THE TITAN	SRM	*		*ES C	F ATTACK	*		*		*IC WIN	D TUNNE	_ * - DN	1S	*	
R-134,	402*	DURING EN	TRY	*		*		*		*		*		*		*	
	*			*		*		*		*		*		*		*	
EDC					TEGRATED VEHICL				RCE	*0.01	/	*AEDC	/	*J.[AILEDA/ RI	*DMS-I	DR-2143
WTA					CONFIGURATION	*W AN	ID W/O SEPAR	₹ A5		*4.5	-	*AEDC	-	*J.	E. VAUGHN	*FEB.	, 197
A422		TESTS ON .			LINES		I ROCKETS FI	[RI*		*4.5					E. VAUGHN	*	
A61A		D-SCALE M				*NG		*		*		*D TUNN	JEL (A)	*-D1	IS	*	
R-144,		-OTS) SPA				*		*		*		*		*		*	
		LE INTEGR				*		*		*		*		*		*	
		ICLE IN T				*		*		*		*		*		*	
		VKF 40-IN				*		*		*		*		*		*	
	*	SONIC WIN	D TUNNEL	*		*		*		*		*		*		*	
	*			*		*		*		*		*		*		*	
RLAD					JNCH CONFIGURAT							*R.I.			ROGGE / RO		
TWT	_	OF THE SU					ND SUPERSON		IRCE	*0.9		*NRLAD			L INTERNATIO	.VON*AN	, 197
B 1		TERFERENC					RACTERISTICS			*2.0			TRISON			*	
A68		S OF THE		*			10DEL 13P-0T	_		*		*C WINE	TUNNEL		A. SARVER	*	
R-134,		MODEL 13P					ORT INTERFE	RE*		*		*			W. SPARKS	*	
		THE TRANS				*NCE	EFFECTS	*		*		*		* - DN	IS	*	
		SUPERSONI	C FLOW	*		*		*		*		*		*		*	
	*	REGIMES		*		*		*		*		*		*	i	*	
	*			*		*		*		*		*		*		*	
	- j														. 11		

	*		*		*		*	*	*MODEL	•	*	*		COGNIZANT	* BASI	10
TEST	*		* CC	ONFIGURATIONS	*	TEST	*	* TYPE OF			E* TESTING	*	-	EST DMS		
ID	*	REPORT TITLE				PURPOSE	*	TEST	*MACH /	RANGE	E* AGENCY	*		PERSONNEL	*OR COMM	4ENTS
MSFC	- *A	AN INVESTIGATION	*EXTF	ERNAL TANK WIT	*OBTAI	N FORCE AND	* ر	FORCE	*0.003	, /	*MSFC /	*	M.K.	ROBERTSON /	/ *DMS-DR-	-2145
14TWT	- *T	TO DETERMINE THE	*H PF	ROTUBERANCES	*MOMEN*	T STATIC ST	ſA*	4	*1.96	-	*NC /	*	NORTI	HROP SERVICE	≟S∗DCT.,	1974
583		STATIC STABILITY							*4.96		*MSFC -		INC.		*	
TA1F		OURING RE-ENTRY							*		*14-INCH TRIS				4S*	
CR-134,4		DF THE 0.003-SCAL	_			-ENTRY COND)I *	•	*		*IC WIND TUN				*	
	_	E MCR O200 BASELI	-		*TIONS		*	•	*		*			. SPARKS	*	
		NE SPACE SHUTTLE	*		*		*		*		*			. SPARKS	*	
		EXTERNAL TANK	*		*		*	i	*		*	*	×-DMS		*	
		MODEL	*		*		*	•	*		*	*	i .		*	
	*		*	. =	*		*	·	*	,	*	*			*	
		FLUTTER TESTS (IS									•			KOTCH /RI -		
		4) OF THE 0.0125-				OF INTERFE			*0.6		*LARC -			HESS /LARC	*APRIL,	1974
547		SCALE SHUTTLE REF				ERODYNAMICS	_		*1.45		*26-INCH TRA				*	
IS4		LECTION PLANE MOD				RATED BY THE	_		*		*NIC BLOWDOW				*	
CR-134,0		EL 30-OTS IN THE				ER, TANK, A			*		*UNNEL	*	*-DMS		*	
		LANGLEY RESEARCH				ON THE WIN			*		*	*	_		*	
		CENTER 26-INCH TR			*FLUIII	ER BOUNDARY	/ *		*		*				*	
		ANSONIC BLOWDOWN TUNNEL TEST NO. 5			*		*		*		*		_		*	
		10NNEL 1EST NO. 5 47	J# *		*		7	_	*		*	7	_		*	
	*		*		*		,	<u>.</u>	*		+	,	*		*	
LARC		RESULTS OF INVEST	T* 140/	A/R SSV ORRIT!	.*DEEIN	F ADDITION	Δ1 ±	*FORCE	*0.015	. /	*LARC /	ý	*-J. H.	CAMPBELL.II/	/R*DMS-DR	-2147
		IGATIONS (DA2OC)		•		TUDINAL STA			*2.5		*LARC -			IELL INTERNAT		
1057		DN AN O.015-SCALE				Y AND CONTR			*4.6		*UNITARY PLA				*	, , ,
0A20C		CONFIGURATION				RACTERISTIC			*		*IND TUNNEL			ENCER / NASA	Δ *	
		140A/B SPACE SHUT				HE UPDATED			*		*		*LARC	•	*	
• • • • • • • • • • • • • • • • • • • •		TLE VEHICLE ORBIT				NFIGURATION			*		*			I. MANN	*	
		ER MODEL (49-0) I				BTAINED IN			*		*		*-DMS		*	
	*N	N THE	*		*A20A 1	TESTS.	*	*	*		*	*	*		*	
	N	NASA/LANGLEY RESE	£		*		*	*	*		*	*	*		*	
	* A	ARCH CENTER UNITA	A *		*		*	*	*		*	*	*		*	
	P	RY PLAN WIND TUNN	/		*		*	*	*		*	*	F		*	
	* E	EL	*		*		*	*	*		*	*	*		*	
	*		*		*		*	*	*		*	*	*		*	
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														1		

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C - *HYP 5HWT - *ATI 5	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	*22-OTS * * * * * * * * * * * * * * * * * * *	* TEST * PURPOSE *TEMPERATURE MEASU* ** ** ** ** ** ** ** ** ** ** ** ** *	* TYPE OF * TEST *HEAT-TRANS * * * * * * * * * * * * *	*MODEL * SCALE *MACH RANGE *O.0175 / *5.3 - *7.3 * * * * * * * * * * * * *	* TESTING E* AGENCY *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * * * * *ARC / *ARC / *ARC -	*B. J. FRICKEN *-DMS * * * * * ** *P. B. KINGSLAND *OCKWELL ** ** ** ** ** ** ** ** ** ** ** ** *	*VOLUME 01 ME*JUNE. 1975 * * * * * * * * * * * * *
ID * R - *HYP HWT - *ATI /*CE 0 *E C 134,440*(M0 *N T *.5- *C W *20) * - *HYP HWT - *ATI (PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* TESTED *22-OTS * * * * * * * * * * * * * * * * * *	* TEST * PURPOSE *TEMPERATURE MEASL *REMENTS * * * * * * * * * * * * *	* TYPE OF * TEST *HEAT-TRANS * * * * * * * * * * * * *	*MODEL * SCALE *MACH RANGE *0.0175 / *5.3 - *7.3 * * * * * * * * * * * * *	* TESTING E* AGENCY *ARC / *ARC - *3.5-FOOT HYPE *NEL * * * * * *ARC / *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	* TEST DMS * PERSONNEL *R. B. KINGSLAND *DCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN *-DMS * *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN	* BASIC *PUBLICATIONS *OR COMMENTS 0,R*DMS-DR-2148 *VOLUME 01 ME*JUNE. 1975 * * * * * * * * * * * * * * * * * * *
ID * R - *HYP SHWT - *ATI - /*CE - 134,440*(MO *N T *.5- *C W *20) * - *HYP SHWT - *ATI - /*CE - 134,441*(MO *N T *.5- *C W *20) * * * * * * * * * * * * * * * * * * *	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* TESTED *22-OTS * * * * * * * * * * * * * * * * * *	* PURPOSE *TEMPERATURE MEASL *REMENTS * * * * * * * * * * * * *	* TEST	* SCALE *MACH RANGE 	E* AGENCY *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	* TEST DMS * PERSONNEL *R. B. KINGSLAND *DCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN *-DMS * *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN	*PUBLICATIONS *OR COMMENTS O.R*DMS-DR-2148 *VOLUME 01 .ME*JUNE, 1975 * * * * * * * * * * * * * * * * * * *
ID * R	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* TESTED *22-OTS * * * * * * * * * * * * * * * * * *	* PURPOSE *TEMPERATURE MEASL *REMENTS * * * * * * * * * * * * *	* TEST	*MACH RANGE *0.0175 / *5.3 - * * * * * * * * * * * * * * * * * * *	E* AGENCY *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	* PERSONNEL *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN.A JN*S *B. J. FRICKEN *-DMS * * ** ** *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN.A JN*S *B. J. FRICKEN	*OR COMMENTS O,R*DMS-DR-2148 *VOLUME 01 ME*JUNE, 1975 * * * * * * * * * * * * *
C - *HYP 5HWT - *ATI 5	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	*22-OTS * * * * * * * * * * * * * * * * * * *	*TEMPERATURE MEASL *REMENTS * * * * * * * * * * * * * * * * * * *	**************************************	*0.0175 / *5.3 - *7.3 * * * * * * * * * * * * * * * * * * *	*ARC / *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	*R. B. KINGSLAND *DCKWELL ER*W. K. LOCKMAN,A IN*S *B. J. FRICKEN *-DMS * * * * * * * * * * * * * * * * * *	**************************************
5HWT - *ATI 5	ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * * * * * * * * * * * * * * * *	*REMENTS * * * * * * * * * * * * *	* * * * * * * * * * * * * *	*5.3 - *7.3 * * * * * * * * * * * * * * * * * * *	*ARC - *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN *-DMS * * * * * * * * * *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN	*VOLUME 01 ME*JUNE. 1975 * * * * * * * * * * * * *
5HWT - *ATI 5	ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * * * * * * * * * * * * * * * *	*REMENTS * * * * * * * * * * * * *	* * * * * * * * * * * * * *	*5.3 - *7.3 * * * * * * * * * * * * * * * * * * *	*ARC - *3.5-FOOT HYPE *SONIC WIND TU *NEL * * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN *-DMS * * * * * * * * * *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN, A JN*S *B. J. FRICKEN	*VOLUME 01 ME*JUNE. 1975 * * * * * * * * * * * * *
20 *E C -134,440*(MO *N T *.5- *C W *20) * C - *HYP 5HWT - *ATI /*CE 20 *E C -134,441*(MO *N T *.5- *C W *20) RC - *RES HT - *IGA) /*10- 90 *ONF -141,805*E \$ *ORB *-0	CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * * * * * * * * * * * * * * * *			* * * * * * * * * * *5.3 -	*SONIC WIND TU *NEL * * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	JN*S *B. J. FRICKEN *-DMS * * * * *R. B. KINGSLAND *OCKWELL R*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	* * * * * * * * * * * * * * * * * * *
-134,440*(M0 *N T *.5- *C W *20)	ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * * * *22-OTS * * * *			*5.3 -	*NEL * * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	*B. J. FRICKEN *-DMS * * * * * ** *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN,A IN*S *B. J. FRICKEN	*VOLUME 02
*N T *.5- *C W *20) - *HYP - *ATI - *C E - 134,441*(MO *N T *.5- *C W *20) - *RES - *IGA -	THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * * *22-OTS * * * *			*5.3 -	* * * *ARC / *ARC - *3.5-FOOT HYPE *SONIC WIND TU	*-DMS * * * *R. B. KINGSLAND *OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
*.5- *C W *20) C - *HYP 5HWT - *ATI 5 /*CE 20 *E C -134,441*(M T *.5- *C W *20) RC - *RES HT - *IGA 0 /*10- 90 **0NF -141,805*E S *ORB *-0	-FOOT HYPERSONI WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * * *22-OTS * * * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	* * * *CKWELL R*W. K. LOCKMAN,A IN*S *B. J. FRICKEN	*VOLUME 02
*C W *20) C - *HYP 5HWT - *ATI 5	WIND TUNNEL(IH-) PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * *22-OTS * * * * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
*20) * C - *HYP 5HWT - *ATI 5	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * *22-OTS * * * * * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
**************************************	PERSONIC AEROHE ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
5HWT - *ATI 5	ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
5HWT - *ATI 5	ING TEST OF SPA SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * *			*5.3 -	*ARC - *3.5-FOOT HYPE *SONIC WIND TU	*OCKWELL ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	*VOLUME 02
5	SHUTTLE VEHICL CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * * *	*REMENIS * * * *	* * * * * *		*3.5-FOOT HYPE *SONIC WIND TU	ER*W. K. LOCKMAN,A JN*S *B. J. FRICKEN	
20 *E C -134,441*(MO *N T *.5- *C W *20) RC - *RES HT - *IGA) /*10- 90 *0NF -141,805*E \$ *ORB *-0	CONFIGURATION 3 ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * *	* * * *	* * *	*/.3 * *	*SONIC WIND TU	JN*S *B. J. FRICKEN	* * * *
-134,441*(MO *N T *.5- *C W *20) RC - *RES HT - *IGA D /*10- 90 *0NF -141,805*E \$ *ORB *-0	ODEL 22-OTS) I THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* * *	* * * * * * * * * * * * * * * * * * * *	* * *	* *		*B. J. FRICKEN	*
*N T *.5- *C W *20) *RC - *RES HT - *IGA 0 /*10- 90 *0NF -141,805*E S *ORB *-0	THE NASA-AMES 3 -FOOT HYPERSONI WIND TUNNEL(IH-	* *	*	*	*	*NEL		*
*.5- *C W *20) RC - *RES HT - *IGA 0 /*10- 90 *0NF -141,805*E S *ORB *-O	-FOOT HYPERSONI WIND TUNNEL(IH-	*	*	*	*			*
*C W *20) *RC - *RES HT - *IGA 0 /*10- 90 *0NF -141,805*E S *ORB *-O	WIND TUNNEL(IH-		*	*	_	·	+-DM2	
*20) * RC - *RES HT - *IGA 0 /*10- 90 *0NF -141,805*E S *ORB *-O		T			*	*	Ţ.	*
*RC - *RES HT - *IGA O /*10- 90 *ONF -141,805*E S *ORB *-O	,	•	Ţ	•	-	*		Ī.
HT - *IGA D /*10- 90 *ONF -141,805*E S *ORB *-0	-	*	*	*	*	*	*	*
HT - *IGA O /*10- 90 *ONF -141,805*E S *ORB *-O	SULTS OF INVEST	*CONFIG. 4 (-1404/	*HYPERSONIC STABIL	*FORCE	*0.01 /	*ROCKWELL/	*P.J. HAWTHORNE	/R*DMS-DR-2149
0 /*10- 90 *ONF -141,805*E S *ORB *-0	ATIONS ON A O.O		*ITY AND CONTROL		*10.3 -	*LARC -	*OCKWELL	*AUGUST. 1975
90 *ONF -141,805*E S *ORB *-O	-SCALE 140A/B C		*	*	*		.O*P.T. BERNOT /NA	
-141,805*E S *ORB *-0	FIGURATION SPAC		*	*	*	*W HYPERSONIC		*
*-0	SHUTTLE VEHICLE		*	*	*	*UNNEL	*J. E. VAUGHN	*
	BITER MODEL 72	*	*	*	*	*	*J. E. VAUGHN	*
+1101	IN THE NASA/LA		*	*	*	*	*-DMS	*
*NGL	LEY RESEARCH CE	*	*	*	*	*	*	*
	ER CONTINUOUS F		*	*	*	*	*	*
*LOW	W HYPERSONIC TU	*	*	*	*	*	*	*
	EL (OA90)	*	*	*	*	*	*	*
*		*	*	*	*	*	*	*
	INVESTIGATION		*OBTAIN HIGH MACH		*0.02112 /		*J. JOHNSON / NA	
	HIGH MACH NUMB		*NUMBER STATIC STA		*2.3 -	*NSI /	*-LARC	*MARCH, 1975
•	STATIC STABILI		*BILITY DATA ON A		*4.63	*LARC -	*W. F. BRADDOCK/	NS*
	CHARACTERISTIC		*LARGE SCALE SRB	*	*	*UNITARY PLAN		*
	FOR A LARGE SCA		*	*	* :	*IND TUNNEL	*V. W. SPARKS	*
	SOLID ROCKET B	* 4	# · · · · · · · · · · · · · · · · · · ·	*	# ·	*	*D.B. WATSON	*
*005	STER	∓ •	来 。	*	平 (*	*-DMS	*
*		∓	*	*	*	*	*	*

				WIND T	UNNEL TEST /	DMS DATA	PROCES	SING				1
	*	*		*		*	*MODEL	 -	*	*	COGNIZANT	* BASIC
TEST	*	*	CONFIGURATIONS	*	TEST	* TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATIO
ID	* REPORT TIT	LE *	TESTED	*	PURPOSE	* TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENT
			THERMOCOUPLE MODE						*ARC /		H. DYE/RI	*DMS-DR-215 *NOV 19
			OF SSV ORB. 139				*7.3		*ARC -		K. LOCKMAN/ARG	.*NUV., 19
33	/*ER TESTS OF				ATED ENTRY	*	*		*3.5-FOOT HYPE			*
16	*0175-SCALE M			*CUND1	TIONS	*	*		*SONIC WIND TU			
?-141,8	15*OF THE ROCKW			*		*	*		*NEL	*-DM	15	*
	*NTERNATIONAL			*		*	*		*	*		*
	*E SHUTTLE OR			*		*	*	•	*	*		*
	*139 (MODEL N	_		*		*	*		*	*		*
	*R 22-0) IN T			*		*	*		*	*		*
	*SA/AMES 3.5-			*		* .	*		*	*		*
	*HYPERSONIC W			*		*	*		* .	*		*
	*UNNEL (TEST	OH6) *		*		*	*		*	*		*
	*	*		*		*	*		*	*		*
DC			VEHICLE 4 ORBITE			L*FORCE	* .0		*AEDC -		ALLEN/ ROCKWEI	
VTF	- *ESTIGATION		(MODEL 51-0)	*ITY /	AND CONTROL	*	*16				HUNTSVILLE OF	
1489	/*PERSONIC VIS	-		*		*	*20		*WIND TUNNEL (*JAN., 19
181	*INTERACTION			*		*	*		*)	•	E. VAUGHN	*
≀-134,4	23*TS DN AN 0.0			*		*	*		*	_	E. VAUGHN	*
	*LE SPACE SHU			*		*	*		*	* - DN	15	*
	*ORBITER S1-0			*		. *	*		*	*		*
	*L IN THE AED			*		*	*		*	*		*
	*HYPERVELOCIT	Y WI *		*		*	*		*	*		*
	*ND TUNNEL	*		*		*	*		*	*		*
	*	*		*		*	*		*	*		*
\RC	- *INVESTIGATIO	N OF *0	DRBITER ALONE	*TO 0	BTAIN HEAT T	R*HEAT-TRAN	S* 0.0	175 /			3. KINGSLAND /	
TW	- *THE HEAT TRA	NSFER*	TANK ALONE	*ANSFI	ER RATE DATA	*	*2.36	-	*LARC -		CKWELL INTERNA	T*OCT., 19
71	/*EFFECTS ON T		SRB ALONE		HE ORBITER,	E*	*3.7		*UNITARY PLAN			*
11	*2-0TS 0.0175	;- *		*XTERI	NAL TANK,	*	*		*IND TUNNEL		W. SPARKS	*
?-151,3	177*SCALE THIN S	KIN T*		*AND	SOLID ROCKET	*	*		*		M. MOSER JR.	*
	*HERMOCOUPLE			*B00\$	TERS	*	*		*	* - D#	48	*
	*(VEHICLE 3 C	ONFI *		*		*	*		*	*		*
	*GURATION)	*		*		*	*		*	*		*
	*	*		*		*	*		*	*		*
												•
	T.											

•

	,			<i>)</i>				
			WIND TUNNEL T	EST / DMS DATA	PROCESSING			163
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS	* TEST	* TYPE OF		* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE	E* AGENCY	* PERSONNEL	*OR COMMENTS
oc	- *HEAT TRANSFER TE	S*MODEL 29-0	*TO DETERMINE	EFFE*FORCE	*8 -	*AEDC /	*M. QUAN AND J.	W.*DMS-DR-2154
В	- *TS OF A 0.0175-S	C*	*CT OF WALL T	EMPER*	*8	*AEDC -	*FOUST/RI	*JAN., 1975
152	/*ALE SPACE SHUTTL		*ATURE ON THE		*		N*W. R. MARTINDA	LE/*
A	*ORBITER MODEL (2		*T OF BOUNDAR		*	*D TUNNEL (B)		*
134	437*9-0) TO DETERMIN		*ER TRANSITIO	N *	*	*	*B. W. MYERS	*
	*THE EFFECT OF SU		*	*	*	*	*-DMS	*
	*RFACE TEMPERATUR *ON BOUNDARY LAYE		*	*	*	*	*	*
	*R TRANSITION AT		*	*	*	*	*	*
	*ACH 8.0 IN THE A		*	*	*	*	*	*
	*DC VKF TUNNEL B		*	*	*	*	*	*
	*TEST OH4A)	*	*	*	*	*	*	*
	•	*	*	*	*	*	*	*
.AD	- *STABILITY AND CO		E*ESTABLISH BA	SIC L*FORCE	*0.0405 /	*NRLAD /	*TERRANCE HUGHE	S A*DMS-DR-2155
T	- *TROL CHARACTERIS		*ONGITUDINAL		*0.12 -	*NRLAD -		E /*SEPT., 1974
	/*ICS FOR THE INNE	R*	*ATERAL-DIREC		*0.20	*LOW SPEED WIN		* -,
10	*MOLD LINE	*	*L STABILITY		*	*TUNNEL	*D. E. POUCHER	*
134.	406*CONFIGURATION OF		*CONTROL FOR	THE I*	*	*	*-DMS	*
	SPACE SHUTTLE OR	B	*ML ORBITER	*	*	*	*	*
	*ITER(OA110)	*	*	*	*	*	*	*
C	- *RESULTS OF AN EX	T+ODDITED WITH ET	* C*DETERMINE EE	EECTS*ENDCE	* 0.01 /	*ROCKWELL/	*R.H. SPANGLER/	PA+DMS-DD-2156
В	- *ERNAL TANK SEPAR		*OF EXTERNAL		* 0.01 / *5.93 -	*AEDC -	*CKWELL	*VOLUME 01
22	/*TION TEST IN THE				*7.98	-	N*J.J. DAILEDA /	
7A	*AEDC/VKF TUNNEL		*ORBITER	*	*	*D TUNNEL (B)		*
	797*0N AN 0.010 SCAL		*	*	*	*	*J. E. VAUGHN	*
	*REPLICA OF THE S		*	*	*	*	*J.T.DAVIET	*
	PACE SHUTTLE VEH	I	*	*	*	*	*-DMS	*
	CLE (MODEL 52-)T)	*	*	*	*	*	*
	*IA17A	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
C	- *RESULTS OF AN EX					*ROCKWELL/	*R.H. SPANGLER/	
В	- *ERNAL TANK SEPAR		*OF EXTERNAL		*5.93 -	*AEDC -	*CKWELL	*VOLUME 02
22 7A	/*TING TEST IN THE			KUM *	*7.98		N*J.J. DAILEDA /	KU*AUGUSI, 1975
	*AEDC/VKF TUNNEL 798*ON AN O.O10 SCAL		*ORBITER	∓	-	*D TUNNEL (B)	*CKWELL *J. E. VAUGHN	# *
(**),	*REPLICA OF THE S		*	*	*	*	*J.T.DAVIET	*
	*PACE SHUTTLE VEH		*			*	*-DMS	*
	*CLE (MODEL 52-OT	-	*	•	*	*. · : + · ; · · ·	*	*
	*IA17A	*	*	*	*	*	*	*
		_				•	•	

					WIND	TUNNEL TEST	/	DMS DATA	PROCE	SSING								164
	*		*		*		*		*MODE	 L	*		·	C	OGNI ZANT	*	BAS	
TES	* ۲		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TE	STING	*	TE	ST DMS	*	PUBLICA	ATIONS
ID	*	REPORT TITLE	*	TESTED	* 	PURPOSE	* 	TEST	*MACH	RANGE	* AG	ENCY	*	P	ERSONNEL	* 	OR COM	4ENTS
AEDC	- *	RESULTS OF AN	EXT*C	DRBITER WITH ET :	S*DETE	RMINE EFFECT	S*F	ORCE	* 0.0	1 /	*ROCK	WELL/	*R	.н.	SPANGLER/	RO*	DMS-DR	-2156
HWTB		ERNAL TANK SEP				XTERNAL TANK			*5.93	- '	*AEDC	-	*C	KWEL	L	*	VOLUME	03
VA422	/*	TION TEST IN T	HE *]	SOLATED ORBITER	*SEPA	RATING FROM	*		*7.98		*HYPE	RSONIC V	V±NI\	I.J.	DAILEDA /	RO*	AUGUST	, 1975
IA 17A	*	AEDC/VKF TUNNE	l. B*1	SOLATED ET	*ORBI	TER	*		*		*D TU	INNEL (B)) +C	KWEL	L	*		
CR-141	,799*	ON AN 0.010 SC	ALE*		*		*		*		*		∗ ∪	I. E.	VAUGHN	*		
	*	REPLICA OF THE	S *		*		*		*		*		+∪	D. T. D.	AVIET	*		
	*	PACE SHUTTLE V	*IHB		*		*		*		*		*-	DMS		*		
	*	CLE (MODEL 52-	OT)*		*		*		*		*		*			*		
	*	IA17A	*		*		*		*		*		*			*		
	*		*		*		*		*		*		*			*		
LARC	- *	HEAT TRANSFER	TES*	DRBITER WITH EXT	E*ORBI	TER/EXTERNAL	. *ŀ	IEAT-TRAN	S*19.8	-	*NASA	· /	*D).G.	WALSTAD/R	.I.*	DMS-DR	-2157
HNT	- *	TS OF AN 0.006	-SC*F	RNAL TANK	*TANK	ASCENT HEAT	I *		*19.8		*LARC				SARVER		DEC.,	1975
28	/*	ALE THIN SKIN	SPA*0	DRBITER	*NG		*		*						MEINDERS	*		
IH19	*	CE SHUTTLE MOD	EL *1	EXTERNAL TANK	*		*		*		*ROGE	N TUNNE	L *-	DMS		*		
CR-141	,822*	(50-0, 41-T)	IN*		*		*		*		*		*			*		
	*	THE LANGLEY RE	SE *		*		*		*		*		*			*		
	*	ARCH CENTER NI	FRO*		*		*		*		*		*			*		
	*	GEN TUNNEL AT	MAC*		*		*		*		*		*			*		
	*	H 19	*		*		*		*		*		*			*		
	*		*		*		*		*		*		*			*		
MSFC	- *	FLOW VISUALIZA	TIO*	013, T9, S7	*TO 0	BTAIN FLOW V	/I *S	TRUCT-DY	N*.6			KWELL/			HAWTHORN			
14TWT		N TESTS OF A C				IZATION PHOT			*3.48		*MSFC		_	Ī	_	*	OCT.,	1976
5 82	/*	4-SCALE SPACE	SHU*		*S TC	HELP INTERP	* 9		*						REBY/NSI	*		
I S6A	*	TTLE VEHICLE 2	24 M*		*ET]	IS1 AERO-NOIS	E*		*		*IC V	NUT DNIV				*		
CR-147		ODEL (NO. 13-0			*DATA	1	*		*		*				MOSER JR	*		
		IN THE MSFC 14	_		*		*		*		*		* -	-DMS		*		
		NCH TRISONIC W	/IND*		*		*		*		*		*			*		
	*	TUNNEL	*		*		*		*		*		*			*		
	*		*		*		*		*		*		*			*		

	*			*		*		*		*MODE!		*	*	COGNIZANT	* BAS	i c
TEST	*			*	CONFIGURATIONS	*	TEST	*	TYPE OF		_	* TESTING	*	TEST DMS	*PUBLIC	
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH.	RANGE	* AGENCY	*	PERSONNEL	*OR COM	IMENTS
ARC					40 A/B SSV ORBI1				ORCE					HN H. CAMPBELL		
66SWT		TS OF SU					STING BASE MO			*0.6		*ARC -				
709		TEM EFFE					TING WITH AND			*2.0		*6-FOOT BY 6-FO			*0CT.,	1974
0A59		CONDUCTE		*			HOUT MPS NOZZL	.E*		*		*OT SUPERSONIC			*	
CR-134,4						* \$		*		*	:	*WIND TUNNEL			*	
		OT SUPER				*		*		*	;	*	* -D	MS	*	
		D TUNNEL		A *		*		*		*	1	*	*		*	
		0.015-50		*		*		*		*	:	*	*		*	
		MODEL OF				*		*		*	:	*	*		*	
		IGURATIO				*		*		*	:	*	*		*	
		SSV ORBI	ITER (OA	59*		*		*		*		*	*		*	
	*)		*		*		*		*	1	*	*		*	
	*			*		*		*		*	1	*	*		*	
ARC					40 A/B SSV ORBI1				DRCE	* 0.0	15 / :	*ROCKWELL/	*10	HN H. CAMPBELL	.*DMS-DR	-2159
66SWT	- *	TS OF SU	JPPORT S	Y\$*E	R	*OF	STING BASE MO	* (*0.6		*ARC -	*RI	, AND WILLARD	*VOLUME	02
709	/*	TEM EFFE	CTS TES	TS*		*UN	FING WITH AND	W*		*2.0	· .	*6-FOOT BY 6-FO)*R.	EMBURY, RI	*OCT.,	1974
0A59		CONDUCTE		*		*IT	HOUT MPS NOZZL	.E*		*		*OT SUPERSONIC	*D.	A. SARVER	*	
CR-134,4	112*	NASA/ARC	6-BY-6	F*		*S		*		*	,	*WIND TUNNEL	*G.	G. MCDONALD	*	
	*	OOT SUPE	RSONIC	WI*		*		*		*	,	*	*-D	MS	*	
	*	ND TUNNE	EL USING	A *		*		*		*	,	*	*		*	
	*	0.015 ~9	SCALE	*		*		*		*	,	*	*		*	
		MODEL OF				*		*		*	,	*	*		*	
		IGURATIO				*		*		*	•	*	*		*	
	*	SSV ORBI	ITER (OA	59*		*		*		*	1	*	*		*	
	*)		*		*		*		*	,	*	*		*	
	*			*		*		*		*		*	*		*	
ARC		WIND TUN					EVALUATE BASI		DRCE) / ,			ESPARZA, E. C		
3.5HWT	_			_	T ALONE		PERSONIC STABI			*5.3				/ROCKWELL INTE	R*MARCH,	1975
191	•	LE_SPACE					TY CHAR. OF OR			*10.3		*3.5-FOOT HYPER		TIONAL	*	44
IA18		INTEGRAT				*IT	ER ATTACHED RI	G*		*		*SONIC WIND TUN	 *		*	
CR-134,4						*		*		*	1	*NEL	*		*	
		S 3.5 FC				*		*		*	,	*	*		*	
		ONIC MIN	ND TUNNE	L *		*		*		*	,	*	*		*	
	*	(IA18)		*		*		*		*	*	*	*		*	
	*			*		*		*		*	*	*	*	4 2	*	
	1					:										
	i .					1						!				
	1											1.1		1		

	WIND TUNNEL TEST / DMS DATA	PROCESSING	166
* * * CONFIGURATIONS ID * REPORT TITLE * TESTED	* TEST * TYPE OF	*MODEL * * SCALE* TESTING *MACH RANGE* AGENCY	* COGNIZANT * BASIC * TEST DMS *PUBLICATION: * PERSONNEL *OR COMMENTS
LERC - *AERODYNAMIC CHARA*SRB-BODY ALONE 10SWT - *CTERISTICS OF MSF*SRB-BODY WITH PR 035	RO*AND CONTROL DURIN*	*2.0 - *LERC - *2.7 *10 BY 10-F00T * *SUPERSONIC WIN * *D TUNNEL	
* * *RESULTS OF INVEST*140 A/B, VEHICLE 3.5HWT - *IGATIONS ON AN O.*4 187 /*015-SCALE 140A/B * 0A36 *CONFIGURATION OF * CR-134,430*THE ROCKWELL INTE* *RNATIONAL SPACE S* *HUTTLE ORBITER IN* *THE NASA/AMES RE * *SEARCH CENTER 3.5* *-FOOT HYPERSONIC * *WIND TUNNEL (0A36* *) *		*5.3 - *ARC - *10.3 *3.5-FOOT HYPER * *SONIC WIND TUN	* * * * * * * * * * * * * * * * * * *
LARC - *AERODYNAMIC RESUL*140A/B UPWT - *TS OF A SUPPORT S* 1097 /*YSTEM INTERFERENC* 0A20B *E EFFECTS TEST CO* CR-134,403*NDUCTED AT NASA/L* *ARC UPWT USING AN* *O.015-SCALE MODE * *L OF THE CONFIGUR* *ATION 140A/B SSV * *ORBITER (0A20B) * * *	**THE PRIMARY OBJEC*FORCE *TIVE OF THIS TEST* *WAS TO DETERMINE * *THE EXTENT * *AERODYNAMIC SIMUL* *ATION IS AFFECTED* *BY BASE MOUNTING * *AN ORBITER MODEL * *WITHOUT MPS NOZZL* *ES, ON A STRAIGHT* *STING. *	* * * * * * * * * * * * * * * * * * *	* *

							WIND	TUNNEL T	EST /	DM	S DATA	PROCE	SSING					167
TEST	*			*	ONF I GURA	ATTONIC	*	TEST	,	* • T	YPE OF	*MODE	SCALE+	* * TE	STING	*	COGNIZANT TEST DMS	* BASIC *PUBLICATIONS
ID	* 1	REPORT	TITLE	*	TEST		*	PURPOSE	·		TEST		RANGE *			*	PERSONNEL	*OR COMMENTS
		. .				_							,		/			
				-		•		ETERMINE ND ENTRY	-		T-TRANS	*0.01 *6.95	•		WELL/ Pan -		HEUSTIS/CALSE CORP.	*A*DMS-DR-2164 *VOLUME 01
								SFER RAT				*19.5					KOTCH/ R. I.	
112			SPACE				*VER	A RANGE	OF MA	*		*	*	*ONIC	SHOCK T	UN*D.	A. SARVER	*
121					ERNAL TA	ANK		D. AND R				*	*	*NEL			B. MEINDERS	*
-141,82		•	7-OT)IN					D. OF PA				*	*	*		*-D	MS	*
			AN 48-I ONIC SH					INTEREST				*	*	* •-		*		*
		_	L (0H12					TER WING EDGE HEA				*	•			*		*
	* IH:		L (01112	/ *				NG ENTRY	11110	*		*	*	*		*		*
	*	- · ,		*			*		,	*		*	*			*		*
LSPAN -	*HE	AT TRAN	SFER TE	\$*MOD	EL 37-01	T (CONF	*TO D	ETERMINE	ASCE	*HEA	T-TRANS	*6.95	- +	*ROCK	WELL/	*ED	HEUSTIS/CALSF	A*DMS-DR-2164
								ND ENTRY				*19.5	*	CALS	PAN -	*N	CORP.	*VOLUME O2
	-							SFER RAT				*					KOTCH/ R. I.	*JAN., 1976
12			SPACE	_				A RANGE				*			SHOCK T		B. MEINDERS	*
21 444 00					ERNAL TA	ANK		D. AND R				*	*	*NEL		* - D'	MS	*
141,62			7-0T)IN AN 48-I					D. OF PAI Interest				*	*			*		*
			ONIC SH					TER WING	_			*	*	*		*		*
			L (0H12					EDGE HEA				*	*	k		*		*
	* I H:	_	• •	*				NG ENTRY		*		*	*	×		*		*
	*			*			*			*		*	*	k		*		*
								ETERMINE	-		T-TRANS		•		WELL/		HEUSTIS/CALSP	
								ND ENTRY				*6.95			PAN -		CORP.	*VOLUME 03
						TON 3 C		SFER RAT				*19.5					KOTCH/ R. I.	*DEC., 1975
12 21			SPACE	-	TER ERNAL TA	AAIV		A RANGE (). AND R				*		*ONIC *NEL	SHUCK TI	-	A. SARVER B. MEINDERS	∓
		_	7-OT)IN		LKNAL IA			D. OF PA				*	*	+ 14EF		* w . * - D1	-	*
1,00		•	AN 48-I					INTEREST				*	*			*	-1J	*
			ONIC SH					TER WING	_			* :	*	k		*		*
			L (OH12					DGE HEA				*	*	k ,	1	*		*
	*IH	21)		*			*DURI	NG ENTRY	•	*		*	*	k	;	*		*
	*			*			*		*	*		*	*	k		*		*
																	Value 1	•
							!		1								4.1	

*		*		*		*		*MODEL		*			COGNIZANT	* BAS	
TEST +			CONFIGURATIONS		TEST		TYPE OF		-	* TESTIN			TEST DMS		
ID * R	EPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	′ ·	K	PERSONNEL	*OR CO	MENTS
FC - *RES	ILTS OF AN T	\\/ * F`	XTERNAL TANK WIT	*NETED	MINE STATIC	. *5	DECCIDE	*0 003	,	*MSEC	, ,	. D F	. RAMSEY /	MSE*DMS-DI	2-2165
_			AND WITHOUT PRO					*1.96	•		•	·C	KAMSLI /	*VOLUM	
			JBERANCES.O.003					*4.96				-	. WINKLER /		
- , -·-	TTLE EXTERNA		•	*MCR O		*		*		*IC WIND			,	*	
-141.823*TAN					NAL TANK	*		*		*		-	V. SPARKS	*	
) IN THE NAS			*	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*		*		*			. POUCHER	*	
	C 14 X 14-IN	•		*		*		*		*		-DMS		*	
*TRI	SONIC WIND T	U *		*		*		*		*		*	_	*	
NNE	L TO DETERMI	NE		*	•	*		*		*	2	k		*	
*STA	TIC PRESSURE	*		*		*		*		*		k		*	
*DIS	TRIBUTIONS	DU∗		*		*		*		*	,	k		*	
RIN	G REENTRY (T	A2		*		*		*		*	,	k		*	
*F)		*		*		*		*		*	,	k		*	
*		*		*		*		*		*	2	k		*	
			XTERNAL TANK WIT				PRESSURE	*0.003	/	*MSFC	•		. RAMSEY /		
	IGATION OF A	N *H	AND WITHOUT PRO	*PRESS	URE DISTRIE	3U*		*1.96		*MSFC		∗C		*VOLUM	
			UBERANCES, 0.003			ED*		*4.96					. WINKLER /	NS*DEC	1975
	TTLE EXTERNA			*MCR C		*		*		*IC WIND		_		*	
-141,824*TAN				*EXTER	NAL TANK	*		*		*			N. SPARKS	*	
) IN THE NAS	.,		*		*		*		*			E. POUCHER	*	
	C 14 X 14-IN			*		*		*		*		·-DMS	S	*	
	SONIC WIND T			*		*		*		*	3	k		*	
	L TO DETERMI			*		*		*		*	1	k		*	
	TIC PRESSURE			*		*		*		*	,	k		*	
	TRIBUTIONS			*		*		*		*	1	k		*	
	G REENTRY (T	A2*		*		*		*		*	,	k		*	
*F)		*		*		*		* .		*	1	*		*	
*		*		*		*		*		*		k		*	

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					,						
			AIW	D TUNNEL TEST /	DMS DATA	PROCESSI					169
	*	*	*		*	*MODEL	*		*	COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CON	FIGURATIONS * TESTED *		* TYPE OF * TEST	* SC *MACH RA		TESTING AGENCY	*	TEST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
SEC.	. *DECIUTE OF AN 1	NV+EVTEE	MAL TANK WITTE	TERMINE STATIO	*DDEccupr	+0.000	/		, b c	DANCEY /	MCC. DNC DD 04CE
	- *RESULTS OF AN I - *ESTIGATION OF A					*0.003			_	. RAMSEY /	MSF*DMS-DR-2165 *VOLUME 03
96	/*0.003-SCALE SPA					*4.96	–		_	WINKIED	/ NS*DEC 1975
A2F	*SHUTTLE EXTERNA			R 0200	*	*		WIND TUNNE		. WINNELN /	*
	25*TANK (MSFC MODE			TERNAL TANK	*.	*	*			W. SPARKS	*
	+460) IN THE NAS		*		*	*	*			E. POUCHER	*
	*MSFC 14 X 14-IN	•	*		*	*	*		*-DM		*
	*TRISONIC WIND T	U *	*		*	*	*		*	_	*
	*NNEL TO DETERMI		*		*	*	*		*		*
	*STATIC PRESSURE		*		*	*	*		*		*
	*DISTRIBUTIONS		*		*	*	*		*		*
	*RING REENTRY (T		*		*	*	*		*		*
	*F)	*	*		*	*	*		*		*
	*	*	*		*	*	*		*		*
ASFC	- *RESULTS OF AN I	NV*EXTER	NAL TANK WIT+DE	TERMINE STATIC	*PRESSURE	*0.003	/ *MS	FC /	*P.E	. RAMSEY /	MSF*DMS-DR-2165
14TWT	- *ESTIGATION OF A	N *H AND	WITHOUT PRO*PR	ESSURE DISTRIBU	J*	*1.96 -	*MS	•	*C		*VOLUME O4
596	/+O.003-SCALE SPA	CE*TUBER	ANCES.0.003 *TI	ONS ON MODIFIED	·)*	*4.96	*14	-INCH TRISC	N*G.W	. WINKLER /	' NS*JAN. 1976
A2F	*SHUTTLE EXTERNA	L *SCALE	*MC	R 0200	*	*		WIND TUNNE			*
R-141,8	26*TANK (MSFC MODE	L *	*EX	TERNAL TANK	*	*	*		*V.	W. SPARKS	*
	+460) IN THE NAS	A/*	*		*	*	*		*D.	E. POUCHER	*
	MSFC 14 X 14-IN	CH	*		*	*	*		*-DM	S	*
	*TRISONIC WIND T	U *	*		*	*	*		*		*
	NNEL TO DETERMI	NE	*		*	*	*		*		*
	*STATIC PRESSURE	*	*		*	*	*		*		*
	*DISTRIBUTIONS	DU+	*		*	*	*		*		*
	RING REENTRY (T	A2	*		*	*	*		*		*
	*F)	*	*		*	*	*		*		*
	*	*	*		*	*	*		*		*

						WIND	TUNNEL TEST	/ DN	IS DATA	PROCES	SING						170
	*		*			*		*		*MODEL		*		*	COGNIZANT	* E	BASIC
TEST	*		*	CON	FIGURATIONS	*	TEST	* 7	YPE OF			* TESTIN			TEST DMS		
ID	* 	REPORT TITL	*		TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	′ 	* 	PERSONNEL	*OR 0	COMMENTS
MSFC 14TWT		RESULTS OF AN STIGATION OF							SSURE	*0.003 *1.96		_			. RAMSEY /		DR-2165
141WI 596		STIGATION OF								*1.96				-	. WINKLER /		
TA2F	/ + C	SHUTTLE EXTERI	NAL *	CALE	AINCES, U. 003	*MCR		.∪≁ *		*4.50		*IC WIND			. WINNER /	*	, 197
	7. 7.77	ANK (MSFC MOI	NAL *3	CALL			RNAL TANK	*		*		*IC WIND	TOMINE		W. SPARKS	*	
010 141,		60) IN THE N				*	INITAL TAIN	*		*		*			E. POUCHER	*	
		ISFC 14 X 14-				*		*		*		*		*-DN		*	
		RISONIC WIND				*		*		*		*		*	. •	*	
		NEL TO DETER				*		*		*		*		*		·*	
	*5	STATIC PRESSU	RE *			*		*		*		*		*		*	
	0	DISTRIBUTIONS	DU			*		*		*		*		*		*	
	* F	RING REENTRY	(TA2*			*		*		*		*		*		*	
	*F	=)	*			*		*		*		*		*		*	
	*		*			*		*		*		*		*		*	
LARC	- *1	HEAT TRANSFER	TES*C	RB.+	ET+SRB	*TO]	NVESTIGATE F	A*HE	T-TRANS	3.7	-	*RI	/		3. WALSTAD/F		
UPWT		TS OF AN 0.00				*RAME	TRICALLY THE	*		* 3.7		*LARC	-		STALLINGS	/LA+JUL	7, 197
1041	/*/	ALE THIN-SKIN	SPA*S	SRB		*ASCE	NT HEATING ()F*		*		*UNITARY				*	
IH16		CE SHUTTLE TH		DRB		*THE	INTEGRATED	*		*		*IND TUNN	NEL		.DAVIET	*	
CR-141,		COUPLE MODEL	•			*VEH	CLE	*		*		*		*-DN	AS .	*	
	0	DTS) IN THE L	ANGL			*		*		*		*		*		*	
		Y RESEARCH C				*		*		*		*		*		*	
		R UNITARY PLA				*		*		*		*		*		*	
		ND TUNNEL AT	M=3.*			*		*		*		*		*		*	
	*7	7 (IH16)	*			*		*		*		*		*		*	
	*		*			*		*		*		*		*		*	
ARC		RESULTS OF AN		140A/	В		IN INCREMENT		RCE		•	*ROCKWELI	•		D. MILAM A		
		ESTIGATION ON					ATA ON THE E			*5.3		*ARC			GILLINS/		JST, 197
190		0.015-SCALE M					OF A STING			*10.3					L INTERNAT	CONA*	
0A98		(49-0) OF THE					ON BASE PRI			*		*SONIC WI	IND TU			*	
CR-141,		WELL INTERNA					S AND FORCE			*		*NEL			CLEARY/NAS	A AM*	
		AL SPACE SHUT					MOMENT DATA			*		*		*ES		*	
		DRBITER IN TH					ARIOUS SURF	AC*		*		*			A. SARVER	*	
	-	SA AMES RESEA				*E DI	FLECTIONS	*		*		*			G. MCDONALI	, * 	
		CENTER 3.5-FO				*		*		*		*		*-DI	42	*	
		PERSONIC WIN	*טוע			*		*		*				*		*	
	*1	NNEL (DA98)	*			*		*		*				*		*	
	*		*			*		*		*		*		*		*	

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		•	WIND TUNNEL TEST /	DMS DATA	PROCESSING			171
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCAL *MACH RANG		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
ARC FHT 17 A32 M-X 71945	- *HEAT TRANSFER TO : - *SURFACE AND GAPS : /*OF RSI TILE ARRAY: *S IN TURBULENT FL: *OW AT MACH 10.3 : *	*N SYSTEM * *	*TO BETTER DEFINE *THE HEATING WHICH *THE TILE SURFACE *AND GAP WALLS *LL EXPERIENCE; TI *LES ARE PART OF T *PS	* * * * *	5*1.0 / *10.3 - *10.3 *	*LARC / *LARC - *CONTINUOUS-FL *W HYPERSONIC *UNNEL *	*DAVID A. THROCKM *RTON/LARC .O*M. M. MOSER JR. T*-DMS * *	*MAY, 1974
RC 1TWT 119 AB1A R-141,	* ** ** ** ** ** ** ** ** **	* * * * * *	* *TO OBTAIN PRESSUR *E DISTRIBUTIONS, *FORCE DATA, AND H *INGE MOMENT 3 *ON THE INTEGRATED *LAUNCH VEHICLE * * *	*FORCE * *	* *0.03 / *0.6 - *2.5 * *	* *ARC / *ARC - *11-FOOT TRANS *NIC WIND TUNN *L (UNITARY) * * *	* *T. J. DZIUBALA, *. CHEE, M. D. MI O*AM/RI IE*D. A. SARVER *M. M. MANN *-DMS * * *	
RC	*H CENTER 11 X 11 *FOOT LEG OF THE U*NITARY PLAN WIND *TUNNEL (IA81A) VO**LUME 1 OF 7 ** **RESULTS OF A PRES	* * * * * * *Launch vehicle 5			* * * * * * * * *0.03 /	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	
1TWT 19 A81A R-141,	- *SURE LOADS INVEST: /*IGATION ON A 0.03: *O-SCALE MODEL (47: B37*-OTS) OF THE INTE: *GRATED SPACE SHUT: *TLE VEHICLE CONFI: *GURATION 5 IN THE: *NASA AMES RESEARC;	* * * *	*E DISTRIBUTIONS, *FORCE DATA, AND H *INGE MOMENTS *ON THE INTEGRATED *LAUNCH VEHICLE *	*	*0.6 - *2.5 * * * *	*ARC - *11-FOOT TRANS *NIC WIND TUNN *L (UNITARY) * *	*. CHEE, M. D. MI O*AM/RI IE*D. A. SARVER *M. M. MANN *-DMS *	*VOLUME 02 *JAN., 1976 * * * * * *
	*H CENTER 11 X 11 *FOOT LEG OF THE U*NITARY PLAN WIND *TUNNEL (IA81A) VO*LUME 2 OF 7	* * *	* * * * * * *	* * * * * * * *	* * * * * *	* * * * * *	* * * * * * *	* * * * * *

ID * REPORT TITLE * TESTED * PURPOSE * TEST *MACH RANGE * AGENCY * PERSONNEL *OR COMMENTS ARC - *RESULTS OF A PRES*LAUNCH VEHICLE 5 *TO OBTAIN PRESSUR*PRESSURE *0.03 / *ARC / *T. J. DZIUBALA, E*DMS-DR-2169 11TWT - *SURE LOADS INVEST*		WIND TUNNEL TEST / DMS	DATA PROCESSING	172
11TWT - *SURE LOADS INVEST* 019			E OF * SCALE* TESTING * TEST D	MS *PUBLICATIONS
11THT - *SURE LOADS INVEST* 019	ARC - *RESULTS OF A PRES*LAUNCH VEHICLE 5	*TO OBTAIN PRESSUR*PRESS	URE *0.03 / *ARC / *T. J. DZI	UBALA. E*DMS-DR-2169
O-19				
CR-141,838*-OTS OF THE INTE*	019 /*IGATION DN A 0.03*			*JAN., 1976
CR-141,838*-OTS OF THE INTE*	IA81A *O-SC/LE MODEL (47*	*INGE MOMENTS *	* *NIC WIND TUNNE*D. A. SAR	VER *
*TLE \Temporal \text{VEHICLE CONFI} * * * * * * * * * * * * * * * * * * *		*ON THE INTEGRATED*	* *L (UNITARY) *M. M. MAN	N *
GURA^ ION 5 IN THE	*GRATED SPACE SHUT*	*LAUNCH VEHICLE *	* * + +-DMS	*
NASA AMES RESEARC	*TLE \'EHICLE CONFI*	* *	* * *	*
*H CENTER 11 X 11 * *FOOT LEG OF THE U* *NITARY PLAN WIND * **TUNNEL (IA81A) VO* **LUME 3 OF 7 * ** ARC - *RESULTS OF A PRES*LAUNCH VEHICLE 5 *TO OBTAIN PRESSUR*PRESSUR* ** ** ARC - *RESULTS OF A PRES*LAUNCH VEHICLE 5 *TO OBTAIN PRESSUR*PRESSUR* ** ** ** ** ** ** ** ** **	*GURATION 5 IN THE*	* *	* * *	*
FOOT LEG OF THE U *NITARY PLAN WIND * *NITARY PLAN WIND * *TUNNEL (IA81A) VO* * *LUME 3 OF 7 * * * ** ** ** ** ** ** ** ** ** ** **	*NASA AMES RESEARC*	* *	* *	*
*NITARY PLAN WIND *	*H CENTER 11 X 11 *	* *	* *	*
TÜNNEL (TAB1A) VO	*FOOT LEG OF THE U*	* *	* * *	*
*LUME 3 OF 7	*NITARY PLAN WIND *	* *	* * *	*
*	*TUNNEL (IA81A) VO*	* *	* * *	*
11TWT - *SURE LOADS INVEST*	*LUME 3 OF 7 *	* *	* * *	*
11TWT - *SURE LOADS INVEST*	* *	* *	* * *	*
O19	ARC - *RESULTS OF A PRES*LAUNCH VEHICLE 5	*TO OBTAIN PRESSUR*PRESS		
IAB1A *O-SCALE MODEL (47*	11TWT - *SURE LOADS INVEST*	*E DISTRIBUTIONS, *FORCE		
CR-141,839*-OTS OF THE INTE*	019 /*IGAT:ON ON A 0.03*	*FORCE DATA, AND H*	*2.5 *11-FOOT TRANSO*AM/RI	*JAN., 1976
GRATIO SPACE SHUT	IAB1A *O-SCALE MODEL (47*	*INGE MOMENTS *		
*TLE \'EHICLE CONFI *	CR-141,839*-OTS OF THE INTE*	*ON THE INTEGRATED*		IN *
GURA ION 5 IN THE * * * * * * * * * * * * * * * * * *	*GRATID SPACE SHUT*	*LAUNCH VEHICLE *	* * * *-DM S	*
NASA AMES RESEARC	*TLE \'EHICLE CONFI*	* *	* * *	*
*H CENTER 11 X 11 *	*GURATION 5 IN THE*	* *	* * *	*
FOOT LEG OF THE U	*NASA AMES RESEARC*	* *	* * *	*
*NITARY PLAN WIND * * * * * * * * * * * * * * * * * * *	*H CENTER 11 X 11 *	* *	* * *	*
TUNNEL (IA81A) VO	*FOOT LEG OF THE U*	* *	* * .	*
	*NITARY PLAN WIND *	*	* * *	*
*LUME 4 0F 7		* *	* *	*
	*LUME 4 OF 7 *	* *	* *	*
* * * * * * * * *	* *	* *	* * *	*

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			WIND TUNNEL TE	EST / DMS DATA	A PROCESSING			173
TEST ID	* * * REPORT TITLE	* * CONFIGURATION: * TESTED	* 5 * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * * SCALE* *MACH RANGE*		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
C TWT 9 81A -141,	- *RESULTS OF A PRE - *SURE LOADS INVES /*IGATION ON A O O *O-SCALE MODEL (4 840*-OTS) OF THE INT *GRATED SPACE SHU *TLE VEHICLE CONF *GURATION 5 IN TH *NASA AMES RESEAR *H CENTER 11 X 11 *FOOT LEG OF THE *NITARY PLAN WIND *TUNNEL (IAB1A) V *LUME 5 OF 7 *	T* 3* 7* E* T* I* E* C* U*	5 *TO OBTAIN PRE *E DISTRIBUTIO *FORCE DATA, A *INGE MOMENTS *ON THE INTEGR *LAUNCH VEHICL * * * * * * * * * * * * *	NS, *FORCE ND H* * RATED*	*0.6 - * *2.5 * *	*ARC / *ARC - *11-FOOT TRANSO *NIC WIND TUNNE * * * * * * * * * * * * * * * * *		
RC TWT 9 81A -141,	- *RESULTS OF A PRE - *SURE LOADS INVES /*IGATION ON A O.O *O-SCALE MODEL (4 841*-OTS) OF THE INT *GRATED SPACE SHU *TLE VEHICLE CONF *GURATION 5 IN TH *NASA AMES RESE AR *H CENTER 11 X 11 *FOOT LEG OF THE *NITARY PLAN WIND *TUNNEL (IAB1A) V *LUME 6 OF 7 *	T* 3* 7* E* T* I* E* U*	**TO OBTAIN PRE *E DISTRIBUTIO *FORCE DATA, A *INGE MOMENTS *ON THE INTEGR *LAUNCH VEHICL * * * * * * * * * * * * * * * * * * *	NS, *FORCE ND H* * ATED*	*0.6 - * *2.5 *	*ARC / *ARC - *11-FOOT TRANSC *NIC WIND TUNNE *L (UNITARY) * * * * * * * * * * * * * * * * * * *	*	

				MIND	TUNNEL TEST	/ 	DMS DATA	PROCES	SSING						17
	*	*		*		*		*MODE!	_	*	*	*	COGNIZANT	* BAS	ic
TEST	*	*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTIN	G +	k	TEST DMS	*PUBLIC	CATION
ID	* REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	* 	PERSONNEL	*OR COM	MENTS
20	. DECLUTE OF A D	DE0 . 1					DECCURE		,	. 4.00	,	. .	I DZZUBALA	E#DMC_DD	. 0460
	*RESULTS OF A P		AUNCH VEHICLE 5					*0.03		*ARC *ARC			J. DZIUBALA Chee. M. D. 1		
	*SURE LOADS INV				STRIBUTIONS		URCE			*11-F00T				*JAN	
	/*IGATION ON A C				CE DATA, AND			*2.5 *					A. SARVER	TUAN.,	197
A81A	*O-SCALE MODEL	•			E MOMENTS	*		Ŧ		*L (UNITA			M. MANN	*	
K-141,84	2*-0TS) OF THE I				THE INTEGRAT	ED#				*L (UNITA		+m. +-DN		*	
	*GRATED SPACE S			*LAUI	NCH VEHICLE	*		*				+ - UN	13	*	
	*TLE VEHICLE CO			*				*		*		-		.	
	*GURATION 5 IN			*		*		*		∓				-	
	*NASA AMES RESE			*		*		*		*				-	
	*H CENTER 11 X			*				*		∓		*		.	
	*FOOT LEG OF TH			*		*		*		*		*			
	*NITARY PLAN WI *TUNNEL (IA81A)			∓		+		*		-		-			
	LUME 7 OF 7	VU		*				-		*		_		•	
	*LUME / UF /	-		-		•		_		-		_		Ţ.	
ac -	*RESULTS OF A	FT 41	AUNCH VEHTCLE E	+TO	DELINE ELEVA	 	ODCE	*0.02	,	*ARC	,	+ + C	TREON/AMES	DE +DMC -DB	2-2170
			AUNCH VEHICLE 5						•				ARCH CENTER	*VOLUME	
	*PLUME EFFECTS /*T ON THE ROCKW				GE MOMENTS A		KESSUKE	*1.40					E. NICHOLS/		
14 A19	*INTERNATIONAL				REMENTAL EFF OF JET PLUM			*1.40		*NIC WIND			E. MICHOLS/	K. +00NE,	19
	3*TEGRATED SPACE				PRESSURE DIS			-		*L (UNITA			A. SARVER		
K-141,54	*UTTLE VEHICLE				LIONS	IK+		÷		* .			B. MEINDERS	*	
	*NG A VEHICLE S			± 100	I TOM2	-		Ţ.		*		* - D!		*	
	*NFIGURATION O.			Ţ		-				*		* D:	45	*	
	*SCALE MODEL (8	_		-		-		*		*		*		*	
	*TS) : N THE 11			*		*		*		*		*		*	
	*1 FOOT LEG OF			-				*		*		*		*	
	*NASA/AMES RESE			*				*		*		*		*	
	*CH CENTER UNIT			*		*		*		*		*		*	
	*PLAN WIND TUNK	-		*		*		*		*		*		*	
	*(IA19)	*		*		*		*		*		*		*	
	*	*		*		*		*		*		*		*	
	•	•		-		-		-		•		•		•	

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			WIND TUNNEL TEST	/ DMS DATA	PROCES	SING			175
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* TEST * PURPOSE	* * TYPE OF * TEST		SCALE* RANGE*	TESTING AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
	- Decly To on A let	AUNION MEUTOLE E		*F0D0F				TD5011/1456	D-DMC DD 0470
RC ITWT	- *RESULTS OF A JET - *PLUME EFFECTS TES		*HINGE MOMENTS AND		*0.02 *0.9	/ *#	ARC -	*S.L. TREON/AMES *ESEARCH CENTER	*VOLUME 02
11W1	/*T ON THE ROCKWELI		*INCREMENTAL EFFE		*1.40			D*M.E. NICHOLS/ R	
14	*INTERNATIONAL IN		*CTS OF JET PLUMES		* 1.40		NIC WIND TUNN		*
	44*TEGRATED SPACE SI		*ON PRESSURE DIST		*		(UNITARY)	*D. A. SARVER	*
, .	*UTTLE VEHICLE US		*RIBUTIONS	*	*	*	(*W. B. MEINDERS	*
	*NG A VEHICLE 5 CO		*	*	*	*		*-DMS	*
	*NFIGURATION 0.02	- *	*	*	*	*		*	*
	SCALE MODEL (88-0)	*	*	*	*		*	*
	*TS) IN THE 11 X	1 *	*	*	*	*		*	*
	*1 FOOT LEG OF TH	*	*	*	*	*		*	*
	*NASA/AMES RESEAR	*	*	*	*	*		*	*
	*CH CENTER UNITAR		*	*	*	*		*	*
	*PLAN WIND TUNNEL	*	*	*	*	*		*	*
	*(IA19)	*	*	*	*	*		*	*
_	*	*	*	*	*	*		*	*
€C	- *RESULTS OF A JET				*0.02	•	ARC /	*S.L. TREON/AMES	
TWT	- *PLUME EFFECTS TE		*HINGE MOMENTS AND		*0.9		ARC -	*ESEARCH CENTER	*VOLUME 03
4	/*T ON THE ROCKWELI		*INCREMENTAL EFFE		*1.40			O*M.E. NICHOLS/R.	I*JUNE, 1975
.19 -444 6	*INTERNATIONAL IN		*CTS OF JET PLUMES		*		VIC WIND TUNN		*
- 141,0	45*TEGRATED SPACE SI *UTTLE VEHICLE US		*ON PRESSURE DIST *RIBUTIONS	*	*	+ L	. (UNITARY)	*D. A. SARVER *W. B. MEINDERS	*
	*NG A VEHICLE 5 CO		*	*	*	*		*-DMS	*
	*NFIGURATION 0.02		•	*	*	*		*	*
	*SCALE MODEL (88-0		*	*	*	*		*	*
	*TS) IN THE 11 X		*	*	*	*		*	*
	*1 FOOT LEG OF THE		*	*	*	*		*	*
	*NASA/AMES RESEAR		*	*	*	*		*	*
	*CH CENTER UNITARY		*	*	*	*		*	*
	*PLAN WIND TUNNEL	*	*	*	*	*		*	*
	*(IA19)	*	*	*	*	*		*	*
	*	*	*	*	*	*		*	*

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					WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING		~		176
	*		*		*		*		*MODE!	 -	*	*	COGNIZANT	* BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
ARC		RESULTS OF PRE		40C ORBITER		AIN PRESSURE		RESSURE	*0.01				H. DYE/RI	*DMS-DR-2171
		RE DISTRIBUTION				RIBUTIONS AT			*7.4		*ARC -		E MARVIN/ARC	*VOLUME 01 *JAN 1976
198 0H38		ESTS OF A 0.010 CALE SPACE SHU				HEATING LOCA			*10.4		*3.5-FOOT HY		B. MEINDERS	*UAN., 1976
		E ORBITER MODE	_			S FOR HIGH AN OF ATTACK A			•		*NEL	*-D	_	-
CK-144,		61-0) IN THE N				H NUMBERS 7			Ţ		+145.	+-U	MS	*
		ARC 3.5-FOOT			*D 10		4147		Ž		*			*
		ERSONIC WIND T			**	J		•	*		*	*		*
		EL (OH38)	# WINT		*		*		*		*	*		*
	*	(0/100)	*		*		*		*		*	*		*
ARC	- *	RESULTS OF PRE	5511*1	ACC ORRITER	*ORT	AIN PRESSURE	D*P	PESSURE	*0.01	/	*ARC /	*W	H. DYE/RI	*DMS-DR-2171
		RE DISTRIBUTIO				RIBUTIONS AT		KESSONE	*7.4		*ARC -		E MARVIN/ARC	*VOLUME O2
198		ESTS OF A 0.01		•		HEATING LOCA			*10.4		*3.5-FOOT HY	_		*JAN., 1976
0H38	-	CALE SPACE SHU				S FOR HIGH A			*				B. MEINDERS	*
		E OREITER MODE				OF ATTACK A			*		*NEL	*-D		*
,		61-0) IN THE N				H NUMBERS 7			*		*	*		*
		/ARC 3.5-F00T			*D 1		*		*		*	*		*
•	*	ERSONIC WIND T	UNN*		*	•	*		*		*	*		*
	*	EL (OH38)	*		*		*		*		*	*		*
	*	•	*		*		*		*		*	*		*
ARC	- *	RESULTS OF PRE	SSU*1	140C ORBITER	*OBT	AIN PRESSURE	D*F	RESSURE	*0.01	/	*ARC /	*W.	H. DYE/RI	*DMS-DR-2171
3.5HWT	~ *	RE DISTRIBUTIO	N T*		*IST	RIBUTIONS AT	H*		*7.4	- '	*ARC -	0ل*	E MARVIN/ARC	*VOLUME 03
198	/*:	ESTS OF A 0.01	0-S*		*IGH	HEATING LOC	AT*		*10.4		*3.5-FOOT HY	PER*D.	A. SARVER	*JAN., 1976
0H38	*	CALE SPACE SHU	TTL*		*ION	S FOR HIGH A	NG*		*		*SONIC WIND	TUN*W.	B. MEINDERS	*
CR-144,	586*	E ORBITER MODE	L (*		*LES	OF ATTACK A	T *		*		*NEL	*-D	MS	*
	*	61-0) IN THE N	ASA*		*MAC	H NUMBERS 7	AN*		*		*	*		*
	*	/ARC 3.5-F00T	HYP*		*D 1	0	*		*		*	*		*
	*	ERSONIC WIND T	UNN*		*		*		*		*	*		*
	*	EL (OH38)	*		*		*		*		*	*		*
	*		*		*		*		*		*	*		*
LARC				SSV ORBITER CONF				IEAT-TRAN			•			II*DMS-DR-2172
60VS				2 (MODEL 21-0 OF					*3.4	~	*LARC -		ARC	*OCT., 1974
R3289				/L70-000139)		FFECTS ON SS		•	*				HN MARROQUIN/	RI*
0A99		NG AN 0.0175-S			*DUR	ING ON-ORBIT	*		*		*SPHERE VON		-	*
CR-134,		E CONFIGURATIO			*		*		*		*RMAN FACILI	TIE*-D	MS	*
		SPACE SHUTTLE			*		*		*		* \$	*		*
		BITER MODEL (2			*		*		*		*	*		*
) IN THE LARC			*		*		*		*	*		*
		FOOT VACUUM SP	HER*		*		*		*		*	*		*
	*	E	*		*		*		*		*	*		*
	*		*		*		*		*		*	*		*

				WIND TUNNEL	TEST /	DMS DATA	PROCESSING			177	
TEST ID	* * * REPORT T	* * ! !TLE *	CONFIGURATIONS TESTED	* TES * PURPO		TYPE OF TEST	*MODEL * SCALE *MACH RANGE	* E* TESTING E* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS	
ARC	- *AERODYNAMI	.C RESUL*	6-OTS	*EXPERIMENT	'AL AERO*'	FORCE	*0.015 /	*LARC /	*J.H. CAMPBELL,II	/*DMS-DR-2173	
	- *TS OF AN A			*DYNAMIC IN			*0.32 -	*ARC -	*RI	*JULY, 1974	
711 IA8	/*PARATION E			*TIONS	*		*1.1		SO*J. E. VAUGHN	*	
	*TEST (IA8) O7*TED IN THE			*	*		*	*VIC MIND ION	NE*M. M. MOSER JR. *-DMS	*	
OK 104, 1	*ARC 14-F00			*	*		*	*	*-DM3	*	
	*ONIC WIND			*	*		*	*	*	*	
	*ON A MODEL			*	*		*	*	*	*	
	*) OF THE R			*	*		*	*	*	*	
	*INTERNATIO			*	*		*	*	*	*	
	*UNCH CONFI			*	*		*	*	*	*	
	*CLE	*		*	*		*	*	*	*	
	*	*		*	*		*	*	*	*	
			VEHICLE 5 CONFIGU					*MSFC /	*E.C.ALLEN/RI	*DMS-DR-2174	
	- *IN THE MSF		=	*STATIC STA			*0.6 -	*MSFC -	*V. W. SPARKS	*VOLUME O1	
594 IA33	/*CH TWT TO I			*CHARACTERI			*4.96	*14-INCH TRIS		*NOV., 1975	
	*NE THE STATE 11*BILITY CHAP			*F THE SHUT			*	*IC WIND TUNN	FF*-DW2	*	
UK 171,0	*STICS OF T			*ION; TO DE			*	*	*	*	
	*4-SCALE MO			*THE EFFECT			*	*	*	*	
	*-OTS) SPAC			*E VEHICLE			*	*	*	*	
	*LE VEHICLE			*YNAMIC CHA			*	*	*	*	
	*IGURATION	(1A33) *		*STICS OF E			*	*	*	*	
	*	*		*RB NOSE SHA			*	*	*	*	
	*	*		*ARE ANGLE			*	*	*	*	
	*	*		*R TO TANK			*	*	*	*	
•	*	*	•	*, AND STIN	G LOCAT*		*	*	*	*	
	*	*		*ION	*		*	*	*	*	
	*	*		*	*		*	*	*	*	
			•								
						1					
						,					

						DAIM	TUNNEL TEST	/	DMS DATA	PROCES	SSING					178
	*			*		*		*		*MODE!				*		* BASIC
TEST		REPOR	T TITLE		CONFIGURATION TESTED	*	TEST PURPOSE		TYPE OF TEST			* TESTI		*	TEST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
MCEO		AAL TANVE	CTIOAT		THE E CONE	CU+70 /	SETERMINE TO	15 as	ODOF	+0.00	4 /	*MCEO	,		C ALLEN/DI	*DMC=DD=0474
MSFC					/EHICLE 5 CONFI				URCE	*0.00 *0.6		*MSFC *MSFC	•		C. ALLEN/RI W. SPARKS	*DMS-DR-2174 *VOLUME 02
14TWT 594		IN THE			KATIUN		TIC STABILIT RACTERISTICS			*4.96			- . TOTEC		B. LOWE	*NOV 1975
1A33		NE THE								*4.90		*IC WIND				*NOV., 1975
							HE SHUTTLE \			*		TIC WIND	IOMME		MO	*
CR-141.						_	E 5 CONFIGUR			.		<u>.</u>		-		Ξ.
		STICS O					; TO DETERM			Ī		Ţ.		Ţ		-
		4-SCALE -OTS) S					EFFECT ON T EHICLE 5 AER					<u>.</u>		Ţ		•
		LE VEHI					MIC CHARACT			-		*		-		•
		IGURATI					CS OF THE E			_				Ţ	•	•
		IGURATI	ON (IA.	33) +			SRB NOSE SH			Ţ		•		-		•
	Ī						RB NOZZLE SI			Ī		•		- T		•
				Ţ			FLARE ANGLE					*		*		*
				Ţ			TER TO TANK			•		_		-		*
							NG. AND STI					*		*		*
							ATION	4G -				•		*		•
	-					* LUC:	ATTON	Ξ		Ţ		-		-		•
MSFC	- *	ANI TRIVE	STICAT	TON #1	VEHICLE 5 CONFI	CH*TO	DETERMINE TI	JE 46	ODCE	*0.00	4 /	*MSFC	/	* =	C. ALLEN/RI	*DMS-DR-2174
14TWT		IN THE					TIC STABILI		UKCL	*0.60		*MSFC	<u>-</u>		W. SPARKS	*VOLUME 03
594		CH TWT					RACTERISTIC:			*4.96					B. LOWE	*NOV 1975
I A 3 3		NE THE					HE SPACE SH			*4.90))	*IC WINE				*1007., 197.
CR-141,							VEHICLE 5 C			-		+10 WINE	7 101414	. L L	/M3	**
CK-141,		STICS C					RATION: TO			_		-		-		*
		4-SCALE					INE THE EFF			-		- -		*		*
		-OTS) S		•			THE VEHICLE			-		•				*
		LE VEHI					ODYNAMIC CH			-		*		<i>-</i>		
		IGURATI					RISTICS OF			-		-		-		*
		IGUKATI	ON (IA	33) 1			AND SRB NOS					-		-		*
							PE, SRB NOZ			*		*		*		*
	_			Ţ.			OUD FLARE A					*		*		*
				-			ORBITER TO			*		*		*		*
							AIRING, AND			*		*		*		*
							LOCATION	317		*		*		*		*
				*		*	COONTION	*		*		*		*		*

						WIND	TUNNEL TEST	/ DMS	DATA	PROCESS	ING						179
TEST ID	*	REPORT	TITLE		GURATIONS ESTED	* * *	TEST PURPOSE		PE OF		CALE	* * TESTI * AGENC		* TE	OGNIZANT ST DMS ERSONNEL	* BAS: *PUBLICA *OR COM	C ATIONS
LAD	- *	SUBSONIC	AND TRAM	N*MODEL 4	9-O + 67TS	*OBTA	IN ORBITER W	I *FORC	CE	* 0.015	i /	*NRLAD	/	*M.T.	HUGHES.R.C.	*DMS-DR-	2175
TWT	- *	SONIC HI	NGE MOMEN	N*INTEGRA	TED VEHIC	*NG B	ENDING LOADS	*PRES		*0.90 -	-	*NRLAD	-	*MENNE	LL / R.I.	*VOLUME	01
82 A70		T AND WI G/TORSIO	NG BENDI				TO DEFINE ELI			*1.50 *					POUCHER	*DEC.,	1974
			N Ristics f				AND BODY FLAI E MOMENTS WHI			*		*C WIND	IUNNEL	*-DM2		*	
,			140A/B IN				N THE SSV IN			*		*		*		*	
	*	TEGRATED	SPACE SH				TED CONFIGUR			*		*		*		*	
		UTTLE VE		*		*TION		*		*		*		*		*	
			OLUME 1 ()* 		*		*		*		*		*		*	
	*	F 3		*		*		*		*		*		*		*	
LAD	- *	SUBSONIC	AND TRAN	N*MODEL 4	9-0 + 67TS	*OBTA	IN ORBITER W	I * FORC	E	* 0.015	5 /	*NRLAD	/	- *M.T.	HUGHES.R.C.	*DMS-DR-	2175
IT							ENDING LOADS					*NRLAD			LL /R.I.	*VOLUME	
	/*	T AND WI	NG BENDI	N*LE		*AND	TO DEFINE ELI	E*		*1.50		*7-F00T	TRISONI	*D. E.	POUCHER	*DEC.,	1974
0		G/TORSIO					AND BODY FLAI			*	:	*C WIND	TUNNEL	*-DMS		*	
134,			RISTICS F				E MOMENTS WH			*		*		*		*	
			140A/B IN SPACE SH				N THE SSV INT TED CONFIGURA	-		*		*		*		*	
		UTTLE VE		*		*TION		*		*		+ +		*		*	
			OLUME 2 C)*		*		*		*		*		*		*	
	*	F 3		*		*	•	*		*		*		*		*	
	*			*		*		*		*		*		*		*	
LAD							IN ORBITER W					*NRLAD			HUGHES,R.C.		
VT 2			NGE MUMEN NG BENDIN				ENDING LOADS TO DEFINE ELI		SURE	*0.90 - *1.50		*NRLAD			LL /R.I. POUCHER	*VOLUME *DEC	-
70		G/TOPSIO		*			AND BODY FLAR			*		*C WIND			PUUCHER	*DEC.,	1974
			RISTICS F				E MOMENTS WH			*	:	*		*		*	
•	*(OR THE -	140A/B IN	1*		*LE I	THE SSV IN	T*		*	:	*		*		*	
			SPACE SH	1 *			TED CONFIGURA	A *		*	:	*		*		*	
		JTTLE VE		*		*TION		*		*	,	*		*		*	
		(1470) V F 3	OLUME 3 C)* 		*		*		*		*				*	
		_		*		*		*		*		* *				*	
	*			*		*		*		*	:	*		*		*	
		•															
					•												

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			WIND T	UNNEL TEST	DMS DATA	PROCES	SING						180
	* *		*		*	*MODEL		*	*		COGNIZANT	_	SIC
TEST		CONFIGURATIONS		TEST	* TYPE OF			* TESTIN			EST DMS		CATIONS
ID 	* REPORT TITLE *	TESTED	* 	PURPOSE	* TEST	*MACH	RANGE	* AGENCY	·		PERSONNEL	*OR CO	5
. ADC	- +CDACE CUUTTLE ODD+	4200 ODDITED	+DETE	RMINE THE EF		* 19.0	_	*LARC	/ 4	u T	. SCALLION/	N+DMS-D	D-2176
ARC 2HT	- *SPACE SHUTTLE ORB* - *ITER TRIMMED CENT*			OF SEVERAL FO		* 21.6		*LARC		ASA		*MAY.	1978
- 26	/*ER OF GRAVITY EXT*			OY, WING-FILE		* 21.0					. MCDONALD		
	ENSION STUDY VOLU			AND CANARD MO		*		*TUNNEL		-DMS		*	
M-X	*ME IV - EFFECTS O*			CATIONS ON TH		*		*		,		*	
72661	*F CONFIGURATION M*			BITER LONGITO		*		*		·		*	
72001	*ODIFICATIONS ON T*			CENTER OF		*		*		4		*	
	HE AERODYNAMICS O			JRE LOCATIONS		*		*	*	ı		*	
	F THE 139B ORBITE		*	JAL LOURITON.	*	*		*		,		*	
	*R AT MACH 20.3 *		*		*	*		*				*	
	* * *		*		*	*		*	*			*	
/ RC	- *RESULTS OF INVEST*	1404/R SSV OPRITE	*TO TE	UVESTIGATE II	N*FORCE	* 0.01	5 /	*RI	/ *	M. F	. NICHOLS/R	r *DMS-D	R-2177
	- *IGAT) ONS ON AN O.*			ENTAL SURFACE				*ARC			. POLEK/ARC		
94	/*O15-SCALE CONFIGU*			SURE EFFECTS		* 10.3		*3.5-F001				*	•
UA83	*RATION 140A/B SPA*			S PITCH ENG		*		*SONIC WI				*	
	510*CE SHUTTLE VEHICL*			PERATION	*	*		*NEL		k		*	
	E ORBITER REACTIO		*	S. ERATEUR	*	*		*	*	k		*	
	*N CONTROL SYSTEM *		*		*	*		*	*	k		*	
	PLUME-IMPINGEMENT		*		*	*		*	4	k		*	
	*MODEL 36-0 IN TH *		*		*	*		*		k		*	
	E NASA/AMES RESEA		*		*	*		*	*	k		*	
	RCH CENTER 3.5-FO		*		*	*		*	4	k		*	
	OT HYPERSONIC WIN		*		*	*		*	*	k		*	
	*D TUNNEL (0A83) *		*		*	*		*	*	k		*	
	* *	ı	*		*	*		*	*	k		*	
ARC	- *INVESTIGATIONS ON*	140A/B	*THE I	PRIMARY TEST	*FORCE	* 0.03	3 /	*ARC	/ .	MARK	E. NICHOLS	/*DMS~D	R-2178
9 75WT	- *AN 0.030-SCALE 5 *		*OBJE	CTIVES ARE TO	0*	*1.6	-	*ARC	- +	∗RI		*AUGUS	T, 1974
7 47	/*PACE SHUTTLE VEHI*		*OBTA	IN CONFIGURA	*	*2.0		*9-F00T I	BY 7-FO:	∗M. M	. MANN	*	
OA53B	*CLE CONFIGURATION*	t .	*TION	140A/B	*	*		*OT SUPE	RSONIC *	-DMS		*	
CR-134,	119*140A/B ORBITER MO*	•	*STAB	ILITY AND CO	N*	*		*WIND TUI	NNEL (U:	k		*	
	DEL IN THE AMES R	•	*TROL	CHARACTERIS	T*	*		*NITARY)	*	ķ		*	
	ESEARCH CENTER 9-	•	*ICS.	CONTROL SUR	F*	*		*	*	k		*	
	*BY 7 FOOT SUPER- *	•	*ACE	EFFECTIVENES	S*	*		*		je .		*	
	SONIC WIND TUNNEL	•		ROL SURFACE		*		*		*		*	
	*(OA50B) *	•	*INGE	MOMENTS, AN	D*	*		*		*		*	
	* *	•	*VERT	ICAL TAIL PA	*	*		*		*		*	
	* *	•	*NEL 1	LOADS.	* .	*		*	,	k		*	
	* *	•	*		*	* .		*	,	*		*	

.

1TWT - *ESTIGATIO 5	T TITLE * T OF AN NV*SS ORBI ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	ARRY-THROUG*S TI CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D VI TIC PANEL *O DO	LE SENSITIVI DEXTREME PRE GRADIENTS A	* TEST P*STRUCT-D T* S*	*MACH	SCALE* TE RANGE* AG /** ARC	ENCY * / *F	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATIO *OR COMMENT
ID	T TITLE * T OF AN NV*SS ORBI ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	TESTED * ITER LOWER *TO : ARRY-THROUG*S T: CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D V: TIC PANEL *O DI	PURPOSE INVESTIGATE TI LE SENSITIVI EXTREME PREE GRADIENTS A	* TEST P*STRUCT-D T* S*	*MACH YN*1.0	RANGE* AG/ *ARC	ENCY * / *F	PERSONNEL	*OR COMMENT
RC - *RESULTS (1TWT - *ESTIGATIONS (1TWT - *ESTIGATIONS (1TWT - *RATIONAL (1TWT - *RATIONAL (1TWT - *RATIONAL (1TWT - *RATIONAL (1TWT - *RATIONAL (1TWT - *SIMULATE (1TWT - *T OF AN (OF AN NV*SS ORBI ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	ITER LOWER *TO : ARRY-THROUG*S T: CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D V: TIC PANEL *O DI	INVESTIGATE TI LE SENSITIVI DEXTREME PRE E GRADIENTS A	P*STRUCT-D T* S*	 YN*1.0	/ *ARC	/ *F		
1TWT - *ESTIGATIO 5	ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	ARRY-THROUG*S TI CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D VI TIC PANEL *O DO	LE SENSITIVI DEXTREME PRE GRADIENTS A	T* S*		•	•	. B. KINGSLAND)/R*DMS-DR-217
1TWT - *ESTIGATIO 5	ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	ARRY-THROUG*S TI CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D VI TIC PANEL *O DO	LE SENSITIVI DEXTREME PRE GRADIENTS A	T* S*		•	•	. B. KINGSLAND)/R*DMS-DR-217
1TWT - *ESTIGATIONS /*ACOUSTIC 7SWT - *RATIONAL 58A/B *ENT OF A R-151,378*LE SPACE *ORBITER: *L TEST P. *SIMULATE! *THE AMES *PLAN WIN. *(MODEL 8 *OS8A AND *RC - *HEAT TRAI. 5HWT - *T OF AN (95 *ATT) IN *-AMES RE: *NTER 3.5 *ERSONIC *EL A	ION OF 'HE*WING CA C AND V B *H STRUC L ENVIR')NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	ARRY-THROUG*S TI CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D VI TIC PANEL *O DO	LE SENSITIVI DEXTREME PRE GRADIENTS A	T* S*		•	•	. D. KINGSEMME	
/*ACOUSTIC 75WT - *RATIONAL 58A/B *ENT OF A R-151,378*LE SPACE *ORBITER *L TEST P *SIMULATE *THE AMES *PLAN WINI *(MODEL B *OSBA AND * RC - *HEAT TRAI .5HWT - *T OF AN (95 /*LE THIN- *AMES RE *NTER 3.5 *ERSONIC *EL A	C AND V.B *H STRUC L ENVIR:)NM*A DUMMY A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	CTURE WITH *Y TO Y PANEL , A*SURI PANEL, OR A*D V TIC PANEL *O DO	EXTREME PRES	S*	+0.00		- *1		*NOV 19
75WT - *RATIONAL 58A/B *ENT OF A R-151,378*LE SPACE *ORBITER *L TEST P *SIMULATER *THE AMES *PLAN WIN *(MODEL B *OSBA AND * RC - *HEAT TRAI .5HWT - *T OF AN (95 /*LE THIN-: 128 *MOCOUPLE R-147,615*UTTLE MOI *A1T) IN *-AME'S RE' *SHWT - *T OF AN (95 /*LE THIN-: 128 *MOCOUPLE R-147,616*UTTLE MOI *H-28) ** RC - *HEAT TRAI .5HWT - *T OF AN (95 /*LE THIN-: 128 *MOCOUPLE R-147,616*UTTLE MOI *A1T) IN *-AMES RE' *A1T) IN *-AME'S RE' *NTER 3.5	L ENVIR')NM*A DUMMY A FULL }CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	Y PANEL , A*SURI Panel, or A*D v Tic panel *O di	GRADIENTS A	-	* 2.5		OOT TRANSO*F		***************************************
**************************************	A FULL ;CA*RIGID P E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	PANEL, OR A+D V TIC PANEL +O DI		N ±	* 2.5		VIND TUNNE*-		**
R-151,378*LE SPACE	E SHUTTLE *N ELAST STRUCTURA* PANEL WITH* ED TPS IN *	TIC PANEL *0 DI			*		VITARY) *	DMS	· •
*ORBITER *L TEST P *SIMULATE *THE AMES *PLAN WIN *(MODEL B *OS8A AND * ** ** ** ** ** ** ** ** *	STRUCTURA* PANEL WITH* ED TPS IN *				*		OT BY 7-FO*		*
*L TEST P. *SIMULATE *THE AMES *PLAN WINN *(MODEL B *OSBA AND * RC - *HEAT TRAI .5HWT - *T OF AN (.95 /*LE THIN41T) IN *-AMES RE **HEAT TRAI .5HWT - *T OF AN (PANEL WITH* ED TPS IN *	◆ A E D (DYNAMIC ENVI		.		JPERSONIC *		*
*SIMULATE *THE AMES *PLAN WINI *(MODEL 8 *OS8A AND * RC - *HEAT TRAI .5HWT - *T OF AN (95	ED TPS IN *	*ROMI		•	-		TUNNEL (U*		*
*THE AMES *PLAN WINI *(MODEL 8 *OS8A AND * RC - *HEAT TRAI .5HWT - *T OF AN (95		*ROMI	INI	_	<u> </u>	*NITA			
*PLAN WINI *(MODEL 8 *OS8A AND * RC - *HEAT TRAI .5HWT - *T OF AN (.95	C LINITTADV +			•	-	TNITA	**		.
*(MODEL 8		<u>.</u>		•	*	.	*		*
*OS8A AND * RC - *HEAT TRAI .5HWT - *T OF AN (95	-				*	*			.
* RC - *HEAT TRAI .5HWT - *T OF AN (95	•				*				∓
.5HWT - *T OF AN (95) B) *	*		*	*				#
.5HWT - *T OF AN O	*	*		* 	*	*	*		* T.DUC DD 040
7*LE THIN-1 128 *MOCOUPLE 128 *MOCOUPLE 147,615*UTTLE MO 15.417 IN 16.418 *AMES RE 17**NTER 3.5 18**ERSONIC 18**ERSONIC 18**EL A								. W. CUMMINGS,	
### ##################################			ATING DATA U		* 5.30			F. FOSTER/RI	
R-147,615*UTTLE MOI *,41T) IN *-AMES RE: *NTER 3.5 *ERSONIC *EL A	-SKIN THER*SSV EXT				*			I. K. LOCKMAN/A	ARC*SEPT., 19
*,41T) IN *-AMES RE: *NTER 3.5 *ERSONIC ' *EL A	E SPACE SH*DEL 41-				*	*NEL	-	. A. SARVER	*
*-AMES RE: *NTER 3.5 *ERSONIC ' *EL A	• •		BORT CONDITION	/ *	*	*		R. B. LOWE	*
*NTER 3.5 *ERSONIC *EL A	N THE NASA*	*S		*	*	*	*-	DMS	*
*ERSONIC *EL A	ESEARCH CE*	*		*	*	*	*		*
EL A	5-F00T HYP	*		*	*	*	*		*
*H-28) * RC - *HEAT TRAI .5HWT - *T OF AN (95	WIND TUNN*	*		*	*	*	*		*
* RC - *HEAT TRAI .5HWT - *T OF AN 0 95	ACH 5.3 (I*	*		*	*	*	*		*
RC - *HEAT TRAI .5HWT - *T OF AN (95	*	*		*	*	*	*		*
.5HWT - *T OF AN 0 95	*	*		*	*	*	*		*
95	ANSFER ™ES∗SSV ORB	BITER (MODE+OBTA	IN AERODYNAM	I*HEAT-TRA	NS* 5.22	- *ARC	- *u	I. W. CUMMINGS,	, T*DMS-DR-218
H28 *MOCOUPLE R-147,616*UTTLE MOI *,41T) IN *-AMES RE: *NTER 3.5			EATING DATA U		* 5.30	*3.5-	FOOT HYPER*.	F. FOSTER/RI	*VOLUME 02
R-147,616*UTTLE MOI *.41T) IN *-AMES RE: *NTER 3.5	-SKIN THER*SSV EXT	T. TANK (MO∗DER	SIMULATED RET	Γ*	*	*SONI	C WIND TUN+W	. K. LOCKMAN/A	ARC*SEPT., 19
*,41T) IN *-AMES RE *NTER 3.5	E SPACE SH*DEL 41-	-T) ∗URN·	TO-LAUNCH-SI	Γ*	*	*NEL	*D	. A. SARVER	*
*-AMES RES *NTER 3.5	JDEL (50-0*	*E AE	BORT CONDITION	V *	*	*	*R	. B. LOWE	*
NTER 3.5	N THE NASA	* \$		*	*	*	*-	DMS	*
	ESEARCH CE*	*		*	*	*	*		*
	5-F00T HYP*	*		*	*	*	*		*
ERSONIC !	WIND TUNN	*		*	* .	*	*		*
	ACH 5.3 (I*	*		*	*	*	*		*
*H-28)	*	*		*	*	*	*		*
*	*	*		*	*	*	*		*
					•				

				WIND	TUNNEL TEST	/ D	MS DATA	PROCES	SING					182
	*	*		*		*		*MODEL	<i>-</i>	*	*	COGNIZANT	* BA	SIC
TEST		*	CONFIGURATIONS				TYPE OF		SCALE	* TESTING	*	TEST DMS		
ID	* REPORT TIT	LE * 	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR CO	OMMENTS
4.00	** INCEDENTA	F000.F	VIEDNAL TANK	. ==			205				. 5.			
ARC	- *A HYPERSONIC - *E AND MOMENT				INVESTIGATE T FFECTS OF PRO		RCE	* 0.00 *5.3	6 /	*MSFC /	*P/	NUL RAMSEY/NASA DMMY DAVIS/ NSI	*DMS-E)R-2181 4074
196	/*OF A 0.006 S			-	RANCES AND RE					*3.5-FOOT HY			*NUV.,	, 1974
TASF	*MODEL OF THE				DS NUMBER ON							G. MCDONALD	<u>.</u>	
	425*330.2 INCH D				FORCE AND MO			*		*NEL		MS		
CK 134,	*ER EXTERNAL				COEFFICIENTS					TINEL		/M3	<u>.</u>	
	*IN THE AMES			± €14.1	COEFFICIENTS	, -		-		* •	-		<u>.</u>	
	*RCH CENTER 3			*		-		.		.			<u>.</u>	
				* -		*		*		+	• 🛨		-	
	*FT. HYPERSON *ND TUNNEL (T			*		*		*		*				
	*NU TUNNEL (T	ASF) *		*		*		*		*	-			
LARC	- *SUPERSONIC C		NOOR / 400	∓		* = = 0	RCE	* 046	·	#1.4DC / /	* -	TONADO COENCEO	*DMC.F	00.0400
UPWT	- *L EFFECTIVEN		1990/ 199	<u>-</u>		*.	KCE	* .016 *2.5		*LARC / *LARC -		ERNARD SPENCER, R./LARC		1977
1101	/*OR FULL AND			<u> </u>		-		*4.63		*UNITARY PLA			+APRIL	_, 19//
1.449	*AL SPAN ELEV	-		Ξ		Ξ		*4.03		*IND TUNNEL	_	MS	-	
	AL SPAN ELEV D62*NFIGURATIONS			*		*				*IND TONNEL	# - I	CMC		
CK-151,				<u>.</u>		-		-		.	-		<u>.</u>	
	* 0.0165 SCAL			*		*				*	*			
	*DEL SPACE SH *ORBITER TEST			*		*		*		* *	*		*	
				*		*		∓		*				
	*N THE LARC U			*		*		*		*	*		*	
	*Y PLAN WIND	I UNNE *				*				*				
	*L	*		*		*		*		# 			*	
LARC	- *CDACE CUUTTI	F 000+4	1404 /8	*	DETERMINE EFF		DOF	* *0.01	,	* *LARC /	# 	. P. PHILLIPS	*******	DR-2183
8TPT	- *SPACE SHUTTL		140A/B				RCE	*0.01		*LARC /		. W. BALL		1977 . . 1977
684	- *ITER TRIMMED /*ER-OF-GRAVIT				OF FUSELAGE AND WING FIL			*1.20		*8-FOOT TRAF			*FCD.	, 1977
LA51	*ENSION STUDY				MODS ON TRANS			*1.20		*IC PRESSUR			-	
TM-X	*UME II-EFFEC				AERO. CHARAC	-		<u>.</u>		*NNEL	. 10+-1	CMC	-	
72661	*CONFIGURATIO				STICS OF A SS					+14145.5			•	
/2001	*DIFICATIONS				FIG.	. v .				*				
	*E AERODYNAMI			*	, 1d.	*		*		•	*		*	
•	*RACTERISTICS			*		*		*		*	*		*	
	*HE 140A/B OR			*		*		*		*	*		*	
	*AT TRANSONIC			*		*		*		*	*		*	
	*EEDS	. Jr. T		*		-		*		*	*		*	
	*	*		*		*		*		*	*		*	
	•	-		•		•		-		-	•		+	

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			183
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCAL		* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
ARC	- *TRANSONIC CONTRO	L*089B/140	*TO DETERMINE LON	IG*FORCE	*0.0165 /	*LARC /	*BERNARD SPENCER,	J*DMS-DR-2184
TPT	- *EFFECTIVENESS FO		*ITUDINAL/LATERAL		*.60 -	*LARC -	*R./LARC	*APRIL, 1977
80	/*R FULL AND PARTI		*CONTROL EFFECTIV		*1.08	*8-FOOT TRANSON		*
148	*L SPAN ELEVON C		*NESS ON COMBINAT		*	-	J*B. J. FRICKEN	*
·- 151,0	61*NFIGURATIONS ON *O.0165 SCALE MOD		*ONS OF INBOARD,		*	*NNEL	*-DMS	*
	*EL SPACE SHUTTLE		*UTBOARD, FULL SF *N WING TRAILING		*	*	*	*
	*ORBITER TESTED I		*DGE CONTROLS	*	*	*	*	*
	*THE LARC 8-FOOT		*	*	*	*	*	*
	*RANSONIC PRESSUR		*	*	*	*	*	*
	*TUNNEL	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	.*
₹C	- *INVESTIGATIONS O	•	*THE PRIMARY TEST		* 0.03 /	*ARC /	*MARK E. NICHOLS	
	- +AN 0.030-SCALE S		*OBJECTIVES ARE T		*2.5 -	*ARC -	*RI	*SEPT., 1974
17 1530	/*PACE SHUTTLE VEH *CLE CONFIGURATIO		*OBTAIN CONFIGURA *TION 140A/B	\	*3.5	*8-FOOT BY 7-FO *OT SUPERSONIC		*
	20*140A/B ORBITER M		*STABILITY AND CO	T NA±	*	*WIND TUNNEL (L		*
. 134, 1	*DEL IN THE AMES		*TROL CHARACTERIS		*	*NITARY)	*	*
	*ESEARCH CENTER U		*ICS. CONTROL SUR		*	*	*	*
	*ITARY PLAN 8-BY		*ACE EFFECTIVENES		*	*	*	*
	7-FOOT SUPERSONI	C	*CONTROL SURFACE	H*	*	*	*	*
	*WIND TUNNEL	*	*INGE MOMENTS, AN		*	*	*	*
	*	*	*VERTICAL TAIL PA	, *	*	*	*	*
	*	*	*NEL LOADS.	*	*	*	*	*
RC .	* * * * * * * * * * * * * * * * * * *	* D* 045 COALE ODDITE	* CARETERNATUE TRANSC	* N+50005	* *0.04E /	*/	*	*DMC DD 040C
	*RESULTS OF DIFFE*ENTIAL ELEVON/AI				*0.015 / *0.35 -	*LARC / *LARC +	*A.I. LINDSEY,M.D *MILAM/RI	*JAN 1975
16		F*TION 140A/B (49-			*1.2		N*R. H. LINDAHL	* * *
116	*OR LATERAL CONTR		*ERAL CONTROL OPT		*	*IC PRESSURE TU		*
-134,4	28*L OPTIMIZATION A	N*	*MIZATION, TRANSON		*	*NNEL	*	*
	D ELEVON HINGE M	0	*C ELEVON HINGE M	10*	*	*	*	*
	*MENT INVESTIGATI		*MENTS, TRANSCINIC		*	*	*	*
	*NS ON AN 0.015-S		*FFECTS OF NEW BA		*	*	*	*
	*ALE MODEL(49-0)		*ELINE 6-INCH ELE		*	*	*	*
	*F THE SPACE SHUT *LE ORBITER IN TH		*ON/ELEVON AND EL *VON/FUSELAGE GAP		*	*	*	*
	*NASA/LANGLEY RES		*, AND TRANSONIC E		*	*	*	*
	*EARCH CENTER 8-F		*FECTS OF THE NEW		*	*	*	*
	*OT TRANSONIC PRE		*SHORT(VL70-00841		*	*	*	*
	*SURE TUNNEL	*	*) OMS PODS	*	*	*	*	*
	*	*	*	*	*	*	*	*

			MIND	TUNNEL TES	1 / DW2 (JAIA PRUCES	21NG						18
*		*	*		*	*MODEL				*	COGNIZANT	*	BASIC
TE T *		* CONFIGUR		TEST	* TYP		SCALE*				TEST DMS		UBLICATION
I) + RE	PORT TITLE	* TES1	ED *	PURPOSE	* TE	ST +MACH	RANGE*	AGENCY		* 	PERSONNEL	•u 	R COMMENTS
IRLAD - *EFFE	CTS OF WING/E	:+1404/B 50	CE CHIIT+TO	DEE1NE 0001	TED+CODOE	+0.040)5 / *R:		,	+D	C. MENNELL	/DT±D	MS-DD-218
	N GAP SEALING					*0.26					B. LOWE	•	OV 19
	FER DOORS ON					*0.26		OW SPEE				*	
	TER ELEVON E					*		JNNEL	. W.Z.	*	•	*	
R-134,421*FFEC			•	SEALING FLA		*	*			*		*	
*19A)		*		OORS	*	*	*			*		*	
*		*	*		*	*	*			*		*	
ARC - *		*	*		*FORCE	*	*L/	ARC	/	*D.B	. WATSON	*D	MS-DR-218
IPWT - *		*	*		*	*	*L	ARC	-	* - DM	S	*1	O LRC
075 /*		*	*		*	*	*U	VITARY	PLAN 1	W*		*	
* eEA		*	*		*	*	* I !	ND TUNN	EL	*		*	
*		*	*		*	*	*			*		*	
RC - *RESL	JLTS OF INVEST	*ORBITER 14	10A/B *TO	INVESTIGATE	OR*FORCE	*1.5	- *Ai	RC	/		CHEE/ROCKWE	ELL *D	MS-DR-218
75WT - *IGA1	TION IA110 ON	*	*BIT	ER WING BEN	IDIN*	*2.5	* A l	RC	-	*M.	M. MANN	* N	ARCH, 19
	O15-SCALE IN		∗G,	ELEVON PANE	L L*	*	-	-FOOT B			S	*	
	TED CONFIGURA		*0AD	S, AND ELEV	'ON *	*		T SUPER				*	
R-141,506*TION			*EFF	ECTIVENESS	*	*	•••	IND TŲN	NEL (U*		*	
	TTLE VEHICLE		*		*	*	*N	ITARY)		*		*	
	THE ARC 9X7 ST		*		*	. *	*			*		*	
	SONIC WIND	*	*		*	*	*			*		*	
	IEL USING MODI		*		*	*	*			*		*	
*LS 6	37-TS AND 49-0) *	*		*	*	*			*			
*		*	*	MED	*	* ^ ~	*		,		C. ALLEN /	D7 40	MC DD-040
	STIGATION IN MSFC TWT TO					* 0.00 *0.6		ASA SFC	<i>'</i>		H. LINDAHL		JUNE. 19
	MSPC IWI TO THE STATIC			AND CONTROL	. CH*	* 4.9		3FC 4-INCH	- TD760			* ()UNE, 19
	BILITY AND CO		*48	CIEKI211C2	*	* 4.9		C WIND			3	*	
R-141.537+TROL			-			*	÷ 1.	C WIND	IOMAL	L.T			
	THE 0.004-S	-	*		•	*	±			*			
	MODEL (74-0)		*		*	*	*			*		*	
	THE SHUTTLE 5				*	*	*			*		*	
_	TER (0A-108)		*		*	*	*			*		*	
*	(OM 100)	*	*		*	*	*			*		*	

			WIND TUNN	EL TEST /	DMS DATA	PROCESSIN	IG					185
	*	*	*	*		*MODEL	*		*	COGNIZANT	* {	BASIC
TEST	*	* CONFIGURATION	5 * T	EST *	TYPE OF	* SCA	LE*	TESTING	* 1	EST DMS	*PUB!	LICATIONS
ID	* REPORT TITLE	* TESTED	* PUR	POSE *	TEST	*MACH RAN	IGE *	AGENCY	* 	PERSONNEL	*OR (COMMENTS
ARC	- *SPACE SHUTTLE OR	B*140A/B	*C. G. EX	TENSION S*F	ORCE	* 0.01	/ *I	LARC /	*P. T	. BERNOT/NAS	A*DMS	-DR-2191
FHT	- *ITER TRIMMED CEN		*TUDY AT	MACH 10 *		*10.3 -	*1	LARC -	*/LAR	ec .	*JUL	Y, 1975
04	/*ER OF GRAVITY EX	.T*	*	*		*10.3	*(CONTINUOUS-FLO	D*J. E	. VAUGHN	*	
A47	*ENSION STUDY: V	'O*	*	*		*	*1	W HYPERSONIC	T+G. G	. MCDONALD	*	
M-X	*LUME 1EFFECTS	0*	*	*		*	*(UNNEL	*-DMS	;	*	
72661	*F CONFIGURATIONS		*	*		*	*		*		*	
	*ON THE AERODYNAM		*	*		*	*		*		*	
	*C CHARACTERISTIC	-	*	*		*	*		*		*	
	*OF THE 140 A/B 0		*	*		*	*		*		*	
	RBITER AT MACH 1	O .	*	*		*	*		*		*	
	*.3	*	*	*		*	*		*		*	
	*	*	*	*		*	*	,	*		*	
IDC ITA	- *AERODYNAMIC RESU - *TS OF A SEPARATI			ORCH TEST*F Eparatio *	ORCE	*0.010 *4.52 -	/ *F	RI / AEDC -		CAMPBELL, KNUDSEN, PA		
DA	/*N EFFECTS TEST (I*	*N EFFECT	S FOR A R*		*4.52	* 5	SUPERSONIC WIN	N*L PE	ARSON/R.I.	*JUL\	/, 1975
187	*A87) ON A 0.01-S		*ANGE OF	SSV ATTIT*		*	*[D TUNNEL (A)			*	
2-141,5	541*ALE MODEL (52-DT	S*	*UDES	*		*	*			. SARVER	*	
	*) OF THE INTEGRA		*	*		*	*			WATSON	*	
	ED SSV IN THE AE	D	*	*		*	*		*-DMS	3	*	
	*C/VKF 40-BY-40 I		*	. *		*	*		*		*	
	CH SUPERSONIC WI	N	*	*		*	*		*		*	
	*D TUNNEL A	*	*	*		*	*		*		*	
	*	· *	*	*		*	, *_		*		*	
EDC NTA	*AERODYNAMIC RESU*TS OF A SEPARATI			ORCE TEST*F EPARATIO *	ORCE	*0.010 *4.52 -		RI / AEDC -		CAMPBELL, KNUDSEN. PA		-DR-2192 JME 02
DA AC	/*N EFFECTS TEST (S FOR A R*		*4.52		SUPERSONIC WIN			3- 4 0E0	
87	*A87) ON A 0.01-S			SSV ATTIT*		*				RT BURT/ARO	*	
	42*ALE MODEL (52-OT		*UDES	SUT MITTIE		*	*	S I STRIFFE (M)		. SARVER	*	
, .	*) OF THE INTEGRA		*	*		*	*			WATSON	*	
	*ED SSV IN THE AE		*	*		*	*		*-DMS		*	
	*C/VKF 40-BY-40 I		*	*		*	*		*		*	
	*CH SUPERSONIC WI		*	*		*	*		*		*	
	*D TUNNEL A	*	*	*		*	*		*		*	
	*	•	•									

_					WIND	TUNNEL TEST	DMS DATA	PROCES	SSING					186
	*		*		*		 *	*MODEL			*	COGNIZANT	* BAS	SIC
TEST	*		*	CONFIGURATIONS	*	TEST	* TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLIC	CATIONS
10	*	REPORT TITLE	*	TESTED	*	PURPOSE	* TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR CO	MMENTS
ARC	- *F	ESULTS OF HEA	T T*S	S ORB. 140B MOD	E*TO (DBTAIN AERO HI	E*HEAT-TRAN	IS*0.017	75 /	*ROCKWELL/	∗W.	H. DYE/RI	*DMS-DI	R-2193
3.5HWT				(MODIFIED 22-0)*ATII	NG DATA ON ORI	B *			*ARC -		E. VAUGHN	*DCT.,	1977
199	/*(.0175-SCALE S	PA *		*ITE	R UNDER SIMULA	A *	* 7.32	2	*3.5-FOOT HYP	ER*M.	M. MOSER JR.	*	
DH26	*(E SHUTTLE ORB	SITE*		*TED	ENTRY CONDIT	I *	*		*SONIC WIND T	UN*-D	MS	*	
CR-151,3	80*F	140B MODEL (MOD*		*ONS		*	*		*NEL	*		*	
	*]	FIED 22-0) IN	I TH*		*		*	*		*	*		*	
	*	NASA-AMES RE	SEA*		*		*	*		*	*		*	
	* [CH CENTER 3.5	5-FO*		*		*	*		*	*		*	
	(T HYPERSONIC	WIN		*		*	*		*	*		*	
	*[TUNNEL	*		*		*	*		*	*		*	
	*		*		*		*	*		*	*		*	
ARC	- *	ESULTS OF A P	RES*L	AUNCH VEHICLE 5	*T0	OBTAIN PRESSU	R*PRESSURE	*0.03	/	*ROCKWELL/	*T.	J. DZIUBALA,	E*DMS-DI	R-2194
97SWT	- *5	URE LOADS INV	/EST+		*E D	ISTRIBUTIONS,	*FORCE	*0.9	-	*ARC -	*.	CHEE, M. D. MI	L*VOLUM	E 01
019	/+1	GATION ON A C	* 0.03		*FOR	CE DATA, AND I	H*	*1.4		*9-FOOT BY 7-	FO*AM	/RI	*NOV.,	1975
I AB 1B	*(-SC/LE MODEL	(47*		*ING	E MOMENTS ON	T*	*		*OT SUPERSONI	C *D.	W.HERSEY	*	
CR-141,8	17*	OTS OF THE I	NTE*	'	*HE	INTEGRATED LA	U ∗	*		*WIND TUNNEL	(U*G.	W. KLUG	*	
	*(RATED SPACE S	*TUH		*NCH	VEHICLE	*	*		*NITARY)	*-D	MS	*	
	1	LE VEHICLE CO	NFI		*		*	*		*	*		*	
	(URATION 5 IN	THE		*		*	*		*	*		*	
	1	IASA AMES RESE	ARC		*		*	*		*	*		*	
		CENTER 9 X 7			*		*	*		*	*		*	
		T LIG OF THE			*		*	*		*	*		*	
		ARY PLAN WIND			*		*	*		*	*		*	
		NEL (IA81B) V			*		*	*		*	*		*	
		E 1 OF 5	*		*		*	*		*	*		*	
	*		*		*		*	*		*	*		*	
ARC	- *	ESULTS OF A F	PRES*L	AUNCH VEHICLE 5	*TO	ORTAIN PRESSU	R*PRESSURE	*0.03	/	*ROCKWELL/	*T.	J. DZIUBALA.	E*DMS~D	R-2194
97SWT		URE LOADS INV				ISTRIBUTIONS.		*0.9	•	*ARC -		CHEE. M. D. M.		
019		GATION ON A C				CE DATA. AND		*1.4		*9-FOOT BY 7-				197
I A 8 1 B		SCALE MODEL				E MOMENTS ON		*		*OT SUPERSONI		•	*	
		OTS) OF THE I	•			INTEGRATED LA		*		*WIND TUNNEL			*	
,.		RATED SPACE S				VEHICLE	*	*		*NITARY)	*-D		*	
		LE VEHICLE CO			*		*	*		*	*		*	
		URATION 5 IN			*		*	*		*	*		*	
		JASA AMES RESE			*		*	*		*	*		*	
	-	I CENTER 9 X 7			*		*	*		*	*		*	
		T LEG OF THE			*		*	*		*	*		*	
		ARY PLAN WIND			*		*	*		*	*		*	
		NEL (IAB1B)			*		· *	*		*	*		*	
		ME 2 OF 5	*		*			•		•				

		`))							`
		1								,							1
							WIND	TUNNEL TEST	·	DMS DATA	A PROCES	 SSING					187
											+MODEI	 1			COGNIZANT	* BAS	::
TEST	Γ .	, *		*	CONF	IGURATIONS	*	TEST	*	TYPE O		SCALE	* TESTING	*	TEST DMS	*PUBLIC	
ID		* REP	ORT TITLE	*		TESTED	*	PURPOSE	*	TEST	*MACH			*	PERSONNEL	*OR COM	MENTS
ARC					.AUNCH	VEHICLE 5		OBTAIN PRESS	-		*0.03		*ROCKWELL/		. J. DZIUBAL		
97SWT			LOADS INVE					STRIBUTIONS	-	ORCE	*0.9	-	*ARC -		CHEE, M. D.		
019			ON ON A O.					CE DATA, AND			*1.4		*9-FOOT BY		•	*DEC.	1975
IA81B			LE MODEL (MOMENTS ON			*		*OT SUPERSOI			*	
CR-141,			OF THE IN					INTEGRATED L	.AU*		*		*WIND TUNNE(*NITARY)	•		*	
			D SPACE SH EHICLE CON				*NCH	VEHICLE	-		*		*NITART)	*-	DMS	•	
			ION 5 IN T	-			Ţ				-		*			<u>.</u>	
			AMES RESEA	–			*		-				*	-			
		-	TER 9 X 7				+				*		*	*		*	
			G OF THE U				*		*		*		*	*		*	
			PLAN WIND				*		*		*		*	*		*	
			(IA81B) VO	-			*		*		*		*	*		*	
		ME 3		*			*		*		*		*	*		*	
	,	k		*			*		*		*		*	*		*	
ARC	- :	RESUL	TS OF A PR	ES*L	AUNCH	VEHICLE 5	*TO 0	OBTAIN PRESS	UR*P	RESSURE	*0.03	1	*ROCKWELL/	*T	. J. DZIUBALA	A. E*DMS-DR	2-2194
97SWT			LOADS INVE					STRIBUTIONS			*0.9		*ARC -		CHEE, M. D.		
019	/:	IGATI	ON ON A O.	03*			*FORG	CE DATA, AND) H*		*1.4		*9-FOOT BY	7-FO*A	M/RI	*DEC.,	1975
I A 8 1 B	•	O-SCA	LE MODEL (47*			*ING	E MOMENTS ON	∤ T*		*		*OT SUPERSOR	VIC +D	.W.HERSEY	*	
CR-141,	820	∗-OTS)	OF THE IN	TE*			*HE I	INTEGRATED L	.AU*		*		*WIND TUNNE	_ (U∗G	. W. KLUG	*	
		GRATE	D SPACE SH	UT*			*NCH	VEHICLE	*		*		*NITARY)	*-	DMS	*	
			EHICLE CON				*		*		*		*	*		*	
			ION 5 IN T				*		*		*		*	*		*	
	;	*NASA	AMES RESEA	RC*			*		*		*		*	*		*	
		H CEN	TER 9 X 7	F0*			*		*		*		*	*		*	
			G OF THE U	-			*		*		*		*	*		*	
			PLAN WIND				*		*		*		*	*		*	
			(IA81B) OV	LU*			*		*		*		*	*		*	
	•	ME 4	OF 5	*			*		*		*		* •	*		*	

					WIND	TUNNEL TEST	/ DI	MS DATA	PROCES	SING						188
	:	*	*		*		*		*MODEL	_	 *	*	COGNIZANT	*	BASI	IC
TEST		*	. *	CONFIGURATIONS		TEST		TYPE OF		SCALE		*	TEST DMS		PUBLICA	
ID	, . -	* REPORT TITL	E *	TESTED	* 	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*!	OR COM	MENTS
											_					
ARC				AUNCH VEHICLE 5					*0.03	•	*ROCKWELL/		. J. DZIUBALA,			
97SWT	_	*SURE LOADS IN				STRIBUTIONS	•	RCE	*0.9		*ARC -		CHEE, M. D. M			
019		*IGATION ON A				CE DATA, AND			*1.4		*9-FOOT BY 7-		•	*	DEC.,	1975
IAB1B		*O-SCALE MODEL	•			MOMENTS ON			*		*OT SUPERSONI			*		
CR-141,		*-OTS) OF THE	-			INTEGRATED L	AU*		*		*WIND TUNNEL	٠.		*		
		*GRATED SPACE			*NCH	VEHICLE	*		*		*NITARY)	*-[DMS	*		
		*TLE VEHICLE C			*		*		*		*	*		*		
		*GURATION 5 IN			*		*		*		*	*		*		
		*NASA AMES RES			*		*		*		*	*	•	*		
		*H CENTER 9 X			*		*		*		*	*		# *		
		*OT LEG OF THE			*		*		*		*	*		*		
		*TARY PLAN WIN			*		*		*		*	*		*		
		NNEL (IA81B)	VOLU		*		*		*		*	*		*		
		*ME 5 OF 5	*		*		*		*		*	*		*		
		*	*		. *		*		*	,	*	*	F THEORY TON	*	DMG DD	0.405
LARC				ORBITER CONFIG. :				RCE	* 0.0	•	*ROCKWELL/		. E. THORNTON			
CFHT		*A82 IN THE NA				INTERACTION			*10.3		*LARC -		. M. MANN	*	FEB.,	1975
113	•	*RC 3'-INCH CF				CTS ON HYPER	_		*10.3		*CONTINUOUS-F		DMS	*		
DA82		*N AN 0.010-SC				AERODYNAMIC			*		*W HYPERSONIC	: T*		*		
CR-134,		*MODEL(32~0) O				RACTERISTICS			*		*UNNEL	*		*		
		*E SPACE SHUTT				TO INVESTIGA			*		*	*		*		
		*ONFIGURATION				(GAS CONSTAN	IT *		*		*	*		*		
		*DETERMINE RCS				ES TEMP.)	*		*	•	*	*		*		
		*JET LOW FIEL				LING EFFECTS			*		*	*		*		
		TERACTION AND				HE RCS SIMIL	.IT		*		*	*		*	!	
		∗INVESTIGATE R	T RE*		*UDE		*		*		*	*		*		
		*AL G/.S EFFECT	'S *		*		*		*		*	*		*		
		*	*		*		*		*		*	*		*	:	
AEDC	-	*RESULTS OF IN	IVEST*0	DRBITER 140A/B		DETERMINE EF		RCE	*8.0	-	*ROCKWELL/		. ESPARZA /ROC			
HWTB	-	*IGAT: ONS OF A	N O.*		*CTS	OF SURFACE	D*		*8.0		*AEDC -		LL INTERNATION			197
71A	/	*O15 SCALE SPA	CE S*		*EFL	ECTIONS ELEV	ON*		*				. I. LINDAY /F	ROC*	:	
0A79		*HUTTLE VEHICL	.E *		*, R	UDDER, SPEED	*		*		*D TUNNEL (B)) *K	WELL INTERNAT:	ION*		
CR-141,	531	*140A/B CONFIG	URAT*		*BRA	KE, AND BODY	′ F*		*		*	* A	=	*		
		*ION WITH MODI			*LAP	CONFIGURATI	ON*		*		*		. M. MANN	*	:	
		*OMS PODS AND			*AT	MACH 8, ANGL	.E *		*		*	* -	DMS	*	:	
		*VONS IN THE A			*OF	ATTACK RANGE	*		*		*	*		*		
		VKF TUNNEL B	(OA7			15D TO 45D.			*		*	*		*	t	
		* 9)	*		*D A	NGLE OF SIDE	SL*		*		*	*		*	•	
		*	*		*IP	RANGE OF -50) T*		*		*	*		*	!	
		*	*		*0 5	D	*		*		*	*		*	:	
		*	*		*		*		*		*	*		*	:	

))								,
						WIND	TUNNEL TES	 т /	DMS DATA	PROCES	SING						189
	*			*		*		*		*MODEL		*	*	COGN		* BAS	IC
TEST ID	*	REPORT	TITLE	* (*	CONFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF TEST	* *MACH	SCALE	_	* * 	TEST (-	*PUBLICA *OR COM	
EDC	- *PR	ESSURE	AND HEAT	T*FT	MODEL MCRO200	*T0	MFASURE INT	FRA*I	HFAT-TRAN	S+O O17	5 /	*MSFC /	*F.	R. BRI	FWFR. MS	SF*DMS-DR	-2197
			SULTS FR				ON HEATING			*16	- '	*AEDC -	*C	J. 5,11		*OCT.,	1974
1291	/*M	THE SPA	CE SHUT	T *		*ES	ON ET MATED	TO*		*19		*HYPERVELOCIT	Y *D.	R. HAE	BERMAN,	A*	
110	*LE	/EXTERN	NAL FUEL	*		*ORB	ITER UNDER	LA *		*		*WIND TUNNEL	•			*	
2-134,4			RACTION				AR FLOW CON	*TIG		*		*)		W. SPA		*	
			AACH NUM			*ION	S	*		*		*			SER JR.	*	
			ID 19 (FI	H*		*		*		*		*	*-D	MS		*	
	*10))		*		*		*		*		*	*			*	
	*			*		*		*		*		*	*			*	
EDC					BITER 140A/B		ERMINE SUPE		ORCE	*2.0	-	*ROCKWELL/		ESPARZ		R*DMS-DR	
			IVENESS				DIFFERENTI			*5.0		*AEDC -			INTERNAT	I*JULY,	1975
A	•		CONTROL				VON/AILERON	LA*		*		*SUPERSONIC W			10041/	*	
115			ON AND				AL CONTROL	*		*		*D TUNNEL (A)			NDSAY /		
(-141,5			NGE MOM				IMIZATION,			*		*			INTERNAT	1.*	
			IGATION				DNIC ELEVON		•	*		*	*0N		ID ALL	*	
			IS-SCALE	* -			MOMENTS, S			*		*	*+.D	H. LIN	NDAHL	*	
		ACE SHU	_	* 4 ÷			NIC EFFECTS			*		*	*-U	M2		*	
			MODEL (14 MODIFIED				NEW BASELIN CH ELEVON/E			-		*	-			*	
			DC VKF	<i>)</i> * ·			AND ELEVON/E			-		<u>.</u>	-			.	
		ND TUNN		*			GE GAPS. AN			*		*	*			*	
•		A115)		*			ERSONIC EFF			*		*	*			*	
	*	A 1 10 ,		*			F THE NEW SI			*		*	*			*	
	*			*			MS PODS.	*		*		*	*			*	
	*			*		*		*		*		*	*			*	
ARC	- *SU	PERSONI	C DYNAM	I *ORE	SITER: ET: SRB	*T0	DETERMINE D	YNA * F	ORCE	*0.015	/	*LARC /	*R.	P. BOY	DEN. D.	*DMS-DR	-2199
			TY DERI				-STABILITY			*2.0	•	*LARC -				*OCT	1976
74	_		THE SP	-			TERISTICS A			*4.63		*UNITARY PLAN					, -
93			E LAUNCI				RSONIC SPEE			*		*IND TUNNEL	*AR		-	*	
43A/B	*VE	HICLE		*		*		*		*		*	*J.	W. BAL	.L	*	
43B	*			*		*		*		*		*	*R.	H. LIN	NDAHL	*	
I-X	*			*		*		*		*		*	*-D	MS		*	
3315	*			*		*		*		*		*	*			*	
	*			*		*		*		*		*	*			*	

			WIND	TUNNEL TEST	r / Di	MS DATA	PROCES	SING					190
	*	*	*		*		*MODEL				COGNIZANT	* BASI	
TEST			·	TEST	*	TYPE OF			TESTING	*	TEST DMS	*PUBLICA	
ID	* REPORT TITE	.E * TE	STED *	PURPOSE	*	TEST	*MACH I	RANGE	AGENCY	*	PERSONNEL	*OR COM	MENTS
LARC	- *SUBSONIC AND	TRAN+ORBITER-	140A/B: S*FORG	ED-OSCILLAT	ΓΙΟ*FO	RCE	*0.3	- *	ROCKWELL/	*D.	C. FREEMAN.	JR*DMS-DR-	-2200
BTPT	- *SONIC DYNAMIC			STS: MEASUR			*1.2		LARC -		R. P. BOYDE		
677	/*BILITY CHARAC			PITCH. ROI			*		8-FOOT TRANS				
LA44	*STICS OF THE			W DAMPING.	_		*		IC PRESSURE			*	
TM-X	*E SHUTTLE LAI		•	FORCE DUE			*		NNEL		W. BALL	*	
3336		*	_	H RATE, CRO			*		k		H. LINDAHL	*	
	*	*		RIVATIVES.			*	,		*-D		*	
	*	*		MOMENT DUI			*	,	k	*	_	*	
	*	*		LL RATE, RO			*		•	*		*	
	*	*		MOMENT DUE			*	,		*		*	
	*	*	*YAW	RATE.	*		*	,	×	*		*	
	*	*	*		*		*		k	*		*	
UW	- *MATED CARRIES	R AER*BOEING	747 CARRIE*TO F	ROVIDE AERO	DDY*F0	RCE	*0.04	/ :	BOEING /	*R.	D. KNUDSEN/B	OEI*DMS-DR	-2201
LSWT	- *ODYNAMIC CHAI						*0.16	- ,	kUW -		K.B. BUCANA		1981
1136	/*RISTICS INVES	STIGA*SS ORBIT	TER (MODEL*TICS	FOR DEVELO	PM*		*0.16	,	LOW SPEED WI	ND*0E	ING	*	
CA3	*TION FOR O.O.	1-SCA*43-0)	*ENT	OF THE 747	AI*		*	,	TUNNEL	*R.	L. HANSON/BO	EIN*	
CR-160,8	854*LE MODEL BOE	ING 7*747 CAR	RIER/ET (M*RCRA	FT FOR ORB	ITE*		*		•	*G		*	
	*47 CARRIER (MODEL*ODEL 128	34-72) *R FE	RRY AND LA	JNC*		*		k	*ძ.	E. VAUGHN	*	
	*TE 1065)/SS (ORBI *	*H .	TO PROVIDE	TR*		*	1	*	*G.	R. LUTZ	*	
	*TER (MODEL 4:	3-0) *	*ADE	DATA FOR ST	TAB*		*	1	*	*-D	MS	*	
	AND 747 CARR	IER/E	*ILI2	ER SIZE AN) L*		*	;	k	*		*	
	T (MODEL 1284	4-72)	*DCAT	ION EFFECT	S, *		*	:	•	*		*	
	*COMB INATIONS	IN *	*AND	TO PROVIDE	DR*		*		k	*		*	
	THE U. OF WAS	SH. A	*AG A	ND STABILI	TY *		*		*	*		*	
	ERONAUTICAL	LABOR	*CHAF	ACTERISTIC	S F*		*	;	*	*		*	
	ATORY (UWAL)	F.K.	*OR 1	HE AIRPLAN	E A*		*	:	*	*		*	
	KIRSTEN WIND	TUNN	*ND E	XTERNAL TA	NK *		*		*	*		*	
	*EL (CA3)	*	*CONF	IGURATION.	*		*	:	*	*		*	
	*	*	*		*		*	:	*	*		*	

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING				19
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* TEST PURPOSE	*	*MODEL * SCALE *MACH RANGE		* * 1 *	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATION *OR COMMENTS
NRLAD	- *SPACE SHUTTLE VE	EH*140A/B OUTER MOLE	D*TO DEFINE FERRY (C*FORCE	*0.26 ~	*ROCKWELL/	*R. (C. MENNELL/RI	*DMS-DR-220:
		G+LINE CONFIGURATI			*0.26	*NRLAD -		H. LINDAHL	*APRIL, 19
731	/*URATION AFTERBOD	Y+ON	*RBODY FAIRING EF	F*	*	*LOW SPEED WI	ND*-DMS	5	*
OA 123	*FAIRING EFFECTS		*ECTS ON ORBITER	-	*	*TUNNEL	*		*
CR-141,5	26+ON 14OA/B ORBITE		*TABILITY AND CON		*	*	*		*
	*AERODYNAMIC CHAR		*ROL CHARACTERIST		*	*	*		*
	*ACTERISTICS USIN		*CS AND TO SUBSTAI		*	*	*		*
	*AN .0405-SCALE N		*TIATE WIND TUNNE		*	*	*		*
	*ODEL ORBITER (43		*RESULTS OBTAINED		*	*	*		*
	*O) IN THE ROCKWE		*AT BOEING AEROSP	*	*	*	*		*
	*L INTERNATIONAL		*ACE COMPANY	*	*	*	*		*
	*.75 X 11 FT LOW *PEED WIND TUNNEL		*	*	*	÷	*		# #
	*(0A123)		•	*	*	*	÷		*
	*	*	<u> </u>	*	*	*	*		*
NRLAD	- *RESULTS OF AN IN	NV+140C OUTER MOLD I	*TO DEFINE ORBITE	R*FORCE	* 0.0405 /	*ROCKWELL/	*M 7	r. HUGHES/RI	*DMS-DR-2203
		E*INE CONFIGURATION			*0.20 -	*NRLAD -		A. SARVER	*APRIL. 197
730	/*VON HINGE MOMENT		*/AILERON EFFECTIV		*0.26	*LOW SPEED WI			*
OA 1 19B	*AND DUAL PANEL E		*ENESS AND TO MEAS		*	*TUNNEL	*-DMS		*
CR-141,5	24*LEVON EFFECTIVEN		*URE INDIVIDUAL E		*	*	*	-	*
	SS USING AN .040)5	*EVON PANEL HINGE		*	*	*		*
	-SCALE MODEL (16	5-	*MOMENTS FOR THE	C*	*	*	*		*
	*O) OF THE CONFIG	SU+	*URRENT 6 INCH EI	_*	*	*	*		*
	RATION 140C SPAC	E	*EVON/ELEVON AND I	E*	*	*	*		*
	*SHUTTLE ORBITER	*	*LEVON FUSELAGE GA	5 *	*	*	*		*
	IN THE ROCKWELL	I	*PS WITH WING/ELE	/*	*	*	*		*
	NTERNATIONAL NAA	\L	*ON GAP SEALING FI	_*	*	*	*		*
	*LOW SPEED WIND T	「U∗	*APPER DOORS	*	*	*	*		*
	*NNEL (0A119B)	*	*	*	*	*	*		*
	*	*	*	*	*	*	*		*
	- *RESULTS OF TRANS	• •	*TO DETERMINE EFF			*ROCKWELL/		. PETROZZI, I	
	- *NIC WIND TUNNEL		*CTS OF CONF. BUIL		*0.6 -	*LARC -		MILAN/ROCKW	E*MAY, 197
693	/*ESTS ON AN O.O10		*DUP, EFFECTS OF I			*8-FOOT TRANS			*
IA43	*SCALE SPACE SHUT		*ROTUBERANCES, ET,		*	*IC PRESSURE			*
CK-141,5	25*LE MATED VEHICLE		*ORBITER FAIRINGS		*	*NNEL	*-DMS	,	*
	*MODEL 72-OTS IN *HE LARC 8-FOOT T		*AND ATTACH STRUCT		# 	*	*		*
			*URE , ELEVON DEFI		* -	# 	# 		*
	*T (IA43)	*	*ECTION EFFECTS OF		+	*	*		#
	*	*	*WING BENDING MOM *ENT	•	- -	*	* •		# .u.
	T	-	- E141	-	~	Ŧ	*		*

				WIND 1	UNNEL TEST	/	DMS DATA	PROCES	SSING					_		192
	*	*		*		*		*MODE!	 L	*		*	COGNIZANT	*	BASI	С
TEST	Γ *	*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TEST	ING	*	TEST DMS	*	PUBLICA	TIONS
ID	* REPORT TI	LE *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGEN	CY	* 	PERSONNEL)+ 	OR COMM	ENTS
LARC	- *RESULTS OF A	1 0.00*R	I SPACE SHUTTLE	*TO DE	TERMINE ST	ΔR×F	ORCE	*0.004	4 /	*ROCKWE	LL/	*P.	J. HAWTHORN	IE/R*[DMS-DR-	2205
22HT			RBITER VEHICLE 4					*19.0		*LARC	,	*I	••••••	-	MAY.	1975
431			MODIFIED) CONFI					*21.6			H HELIL	JM∗D.	A. SARVER	*	·	
OA 109	*N SPACE SHU			*AT M	–	*		*		*TUNNEL		*R.	B. LOWE	*		
CR-141.	532*EHICLE ORBI			*		*		*		*		*-D	MS	*		
	*DEL (74-0)			*		*		*		*		*		*		
	*NASA/LANGLE	RES *		*		*		*		*		*		*		
	EARCH CENTER	R HYPE		*		*		*		*		*		*		
	RSONIC HELI	JM TUN	•	*		*		*		*		* .		*		
	*NEL (0A109)	*		*		*		*		*		*		*		
	*	*		*		*		*		*		*		*		
LARC	- *RESULTS OF	INVEST*C	.010-SCALE OUTER	R*TO OF	STAIN SIX-C	OM*I	FORCE	*.010	/	*LARC	/	*M.	T. PETROZZI	, M*I	DMS-DR-	2206
UPWT	- *IGATIONS ON	AN 0. *M	OLD LINE MODEL	*PONE	NT FORCE AN	D *		*1.60	-	*LARC	-	*.	D. MILAM/RI	*	MAY,	1975
1088/1	119/+010-SCALE 1	40A/B +C	F THE 140A/B COM	N*MOME!	NT DATA FOR	T *		*4.63		*UNITAR	Y PLAN	W*R.	H. LINDAHL	*		
IA44	*CONFIGURATION	ON (MO*F	IGURATION	*HE MA	ATED VEHICL	E *		*		*IND TU	NNEL	*-D	MS	*		
CR-141,	,528*DEL 720TS) (OF THE*		*AT SI	JBSONIC AND	T*		*		*		*		*		
	*ROCKWELL IN	TERNA *		*RANS	DNIC CONDIT	* 01		*		*		*		*		
	TIONAL SPACE	SHUT		*NS;E	FFECTS OF C	*N0		*		*		*		*		
	TLE ORBITER	IN TH		*FIGUI	RATION BUIL	D-*		*		*		*		*		
	E NASA/LANG	LEY RE		*UP;EI	FFECTS OF P	R0*		*		*		*		*		
	SEARCH CENT	ER UNI		*TURB!	ERANCES,ET/	OR*		*		*		*		*		
	TARY PLAN W	IND TU		*BITE	R FAIRINGS	AN*		*		*		*		*		
	*NNEL (IA44)	*		*D AT	TACK STRUCT	UR*		*		*		*		*		
	*	*		*ES;E	LEVON DEFLE	CT*		*		*		*		*		
	*	*		*ION	EFFECTS ON	WI*		*		*		*		*		
	*	*		*NG BI	ENDING MOME	NT*		*		*		*		*		
	*	*		*		*		*		*		*		*		

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	,	•		·						
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING	- <i></i>				193
			***************************************			<u>.</u>				
	*	*	*	*	*MODEL	*		COGNIZANT	* BAS	
TEST ID	* DEDOOT TITLE	* CONFIGURATIONS		* TYPE OF				EST DMS	*PUBLIC	
	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	GE* AGENCY	' *	PERSONNEL	*OR COM	MENIS
SFC	- *AN INVESTIGATION				*0.4 -	*MSFC	•	. RAMSEY/MSF		
RWT 33	- *TO DETERMINE THE				*0.6	*MSFC		. SPARKS	*JULY,	1976
129F	*TION ON THE 0.01		O*TION OVER THE FO *E-SECTION OF THE		*	*HIGH KEY	'NOLDS *-DMS		÷	
	08*7 SCALE SOLID RO		*146-INCH DIA. SR		*	*NNEL	# 101 TAIL TAIL		*	
. , 7, 0	*KET BOOSTER FORE		*	*	*	**************************************	*		*	
	*ODY (MSFC MODEL		*	*	*	*	*		*	
	+67) AT HIGH ANGL		*	*	*	*	*		*	
	*S OF ATTACK AT D		*	*	*	*	*		*	
	*NEAR 90 DEGREES		*	*	*	*	*		*	
	AND HIGH REYNOLD	S	*	*	*	*	*		*	
	*NUMBERS IN THE M	*	*	*	*	*	*		*	
	SFC HIGH REYNOLD	S	*	*	*	*	*		*	
	*NUMBER WIND TUNN	*	*	*	*	*	*		*	
	*EL	*	*	*	*	*	*		*	
	*	*	*	*	*	*	*		*	
	 *AN INVESTIGATION 		*TO DETERMINE THE	*PRESSURE	*0.0091 /	/ *MSFC	/ *P. E.	RAMSEY/MSF	C*DMS-DR	-2208
	- *OF THE 0.0091SCA		*PRESSURE DISTRIB		*.6 ~	*MSFC		. WINKLER, T		
9	/*E EXTERNAL TANK		*TION AROUND THE	N*	*4.96		TRISON*C. DA		*JAN.,	1976
3F	*GIVE NOSE (MSFC		*OSE CAP	*	*	*IC WIND	TUNNEL * V. W.		*	
-144,5	90*0DEL 470) IN THE		*	*	*	*		MOSER JR.	*	
	*MSFC 14 INCH TWT		*	*	*	*	*-DMS		*	
	*TO DITERMINE THE		*	*	*	*	*		*	
	*PRESSURE DISTRIB		*	*	*	*	*		*	
	*TION AROUND THE		平	# .	*	*	*		*	
	*XTERMAL TANK NOS	⊑.T ±	*	*	-	* *	*		*	
FC	- *AN INVESTIGATION	*MODEL NO 470	*TO DETERMINE THE	*DDECCHDE	* *0.0091 /	* ′*MSFC	* *D =	RAMSEY/MSF	**************************************	-2208
	- *OF THE 0.00915CA		*PRESSURE DISTRIB		*.6 -	*MSFC		WINKLER, T		
9	/*E EXTERNAL TANK		*TION AROUND THE		*4.96	_	TRISON+C. DA		*JAN.,	1976
F	*GIVE NOSE (MSFC		*OSE CAP	*	*		TUNNEL * V. W.		*	1570
	91*ODEL 470) IN THE		*	*	*	*		MOSER JR.	*	
	*MSFC 14 INCH TWT		*	*	*	*	*-DMS		*	
	*TO DETERMINE THE		*	*	*	*	*		*	
	*PRESSURE DISTRIB		*	*	*	*	*		*	
	TION AROUND THE	E	*	*	*	*	*		*	
	XTERNAL TANK NOS	E	*	*	* .	*	*		*	
	*	*	*	*	*	*	*		*	

LSWT - *E 736	REPORT TITLE RESULTS OF A SPA E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATIO STUDY USING A 14 MODEL ORBITER (4	* .C*MODEL / .E* .*	43-0	* TEST * PURPOSE *INVESTIGATE A *YNAMIC STABIL	* TI	*MODEL PE OF * EST *MACH	SCALE*	TESTING AGENCY	* COGNI * TEST D * PERSO	MS *PUBLICA	TIONS
NRLAD - *FLSWT - *E736	RESULIS OF A SPA E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATIO STUDY USING A 14 OA/B O.0405-SCAL	* .C*MODEL / .E* .*	TESTED 43-0	* PURPOSE *INVESTIGATE A	* TI	PE OF *	SCALE*		* TEST D	MS *PUBLICA	TIONS
NRLAD - *FLSWT - *E736	RESULIS OF A SPA E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATIO STUDY USING A 14 OA/B O.0405-SCAL	* .C*MODEL / .E* .*	TESTED 43-0	* PURPOSE *INVESTIGATE A	* TI						
NRLAD - *F LSWT - *E 736	RESULIS OF A SPA E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATIO STUDY USING A 14 OA/B O.0405-SCAL	C*MODEL /	43-0	*INVESTIGATE A							
LSWT - *E 736	E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATI STUDY USING A 14 OA/B O.O4O5-SCAL	.E* ` * \I*			EDOD * EODC!						
LSWT - *E 736	E SHUTTLE VEHICL FERRY CONFIGURAT ION AFTERBODY FA RING OPTIMIZATI STUDY USING A 14 OA/B O.O4O5-SCAL	.E* ` * \I*				*.26	- *1	ROCKWELL/	*R. C. MEN	NEL.F. F*DMS-DR-	-2209
OA124 *1 CR-141,536*F *6 *6 *6 *7 *8 *7 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8	ION AFTERBODY FA RING OPTIMIZATIO STUDY USING A 14 OA/B O.O4O5-SCAL	I*				*.26		NRLAD -		ALD/ROCK*JUNE,	1975
CR-141,536+F *5 *6 *1 *7 *6 *8 *8 *8 *ARC - *6 3.5HWT - *1 200 /*1 IH27 *1 CR-151,372*F *1	RING OPTIMIZATIO STUDY USING A 14 OA/B O.O4O5-SCAL			*AND CONTROL C		*	*	LOW SPEED W	IND*WELL	*	
*5 *6 *7 *6 *7 *6 *7 *7 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8 *8	STUDY USING A 14 OA/B O.O4O5-SCAL	N*		*CTERISTICS OF	THE*	*	*	TUNNEL	- *R. B. LOW	/E *	
*(**) *(**)	0A/B 0.0405-SCAL			*SSV FERRY CON	FIG *	*	*		*-DMS	*	
*** *** *** *** *** *** *** ***		, *		*URATION	*	*	*		*	*	
**** *** *** ARC - *(3.5HWT - * 200 / * IH27 * CR-151,372** *	MODEL ORBITER (4			*	*	*	*		*	*	
*! ** *RC - *(3.5HWT - *! 200 /*! IH27 *! CR-151,372*! *!				*	*	*	*		*	*	
**************************************	3-0) IN THE ROCK			*	*	*	*		*	*	
*(**) ** ARC - *(3.5HWT - * 200 /* IH27 * CR-151,372* * **	ELL INTERNATION			*	*	*	*		*	*	
*** ARC - *(3.5HWT - * 200 /* IH27 * CR-151,372* **	7.75 X 11.0 FT L			*	*	*	*		*	*	
*ARC - *(3.5HWT - * 200 / * IH27 * CR-151,372* *	OW SPEED WIND TO			*	*	*	*		*	*	
3.5HWT - * 200 /* IH27 * CR-151,372* *	NEL (OA124)	*		*	*	*	*		*	*	
3.5HWT - * 200 /* IH27 * CR-151,372* *	CONNECTIVE HEAT	* -T#45-0 V	TTT (FLAT D	* ************************************	* FFEE+UEAT	* TDANC*E 00		ROCKWELL/	* *T E EOC	STER. W. *DMS-DR-	2240
200 /*I IH27 *I CR-151,372*I *:				*CTS OF SURFAC		*5.24		ARC -	*H. DYE/RI	•	1979
IH27 * CR-151,372* * *	LTS FOR A GÀP. (*OTUBERANCES A		*5.24			PER*W. K. LOC	- •	1973
CR-151,372*I	LINDRICAL-PROTUE			*HOCK IMPINGEM		*			TUN*D.W.HERSE		
*:				*ON SURFACE HE		*		NEL WIND	*J. E. VAU		
*1	IMPINGEMENT FLAT			*G AND HEATING		*	*		*-DMS	*	
	PLATE MODEL IN			*SIMULATED TPS		*	*		*	*	
	E NASA-AMES 3.5			*E GAPS	*	*	*		*	*	
*(OOT HYPERSONIC V			*	*	*	*		*	*	
	ND TUNNEL (TEST			*	*	*	*		*	*	
	H27, MODEL 15-0			*	*	*	*		*	*	
*	111)	*		*	*	*	*		*	*	
*		*		*	*	*	*		*	*	
TBCA - *I	RESULTS OF A O.	03*0.03-5	CALE AX 131	*DETERMINE PER	FORM*FORC	E *0.03	/ *	BOEING /	*R.D. KNUD	DSEN, J. *DMS~DR~	-2211
	-SCALE AERODYNA	/I*9 I-1	(CARRIER) M	I*ANCE,STABILIT	Y,AN*	*0.15		TBCA -		, E. DICK*VOLUME	
•	C CHARACTERISTIC			*D CONTROL CHA		*0.70		-	WIND*SON/BOEIN		197
	INVESTIGATION OF					*	*	TUNNEL	*D. A. SAR		
	A BOEING 747 CA		•	*US CARRIER AI		*	*		*R. H. LIN	√DAHL *	
	IER (MODEL NO. A)			*FT CONFIGURAT		*	*		*-DMS	*	
	1319 I-1) MATED			*; INVESTIGATE		*	*		*	*	
	ITH A SPACE SHU			*DYNAMIC CHARA		*	*		*	*	
	LE ORBITER (MODI			*ISTICS OF THE		*	*		*	*	
	45-0) CONDUCTED			*RIER MATED WI		*	*		*	*	
	IN THE BOEING TH			*HE ORBITER, C		*	*		*	*	
	NSONIC WIND TUNI	* *		*ER ALONE, AND *ORBITER ALONE		∓	*		*	# *	
- 1	L (U40)	~		*URBITER ALUNE		*	*		*	*	
•		₹		₹	~	Ŧ					

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										,	WIND	TUNNEL T	EST /	DMS DATA	PROCE	SSING	i						195
		*				*					*		*		*MODE	 L	*		*		COGNIZANT	+ BA	SIC
TEST	•	*				*	100	NFIG	URATIO	DNS	*	TEST	*	TYPE O				TESTING	*		EST DMS		CATIONS
ID		*	REPOR	TT TE	TLE	*			STED		*	PURPOSE		TEST				AGENCY	*		PERSONNEL	*OR CO	MMENTS
CA	_	*DF	SIII TS	OF.	A O O	3*0	03.	- SCA	IF AX	131	*DETE	RMINE PE	DENDM*	FORCE	*0.03	,	*Ri	OEING /	*P	n	KNUDSEN. J.	*DMS-D	R-2211
WT												.STABILI			*0.05	•		BCA -			STYN, E. DIC		
131	_		CHARA					•	MKKIER			NTROL CH	•		*0.70						BOEING CO.	*SEPT.	
15									I E 16.			TICS OF			*0.70			UNNEL			. SARVER	** 3LF 1.	, 13/5
						_						ARRIER A			-		*	DIAIAEL			. LINDAHL	- -	
141,			i-0) (KDI	I E K)	MUDEL						<u>.</u>		1			DMS		-	
					_							ONFIGURA			-				- -	DM2		- -	
			THE									ESTIGATE			*		*					*	
			ONIC		IUNN	lE*						MIC CHAR			*		*		*			*	
		* L.	(CA5)	,		*						CS OF TH			*		*		*			*	
		*				*						MATED W			*		*		*			*	
		*				*						RBITER,C			*		*		*			*	
		*				*					*R ALI	ONE, AND	ORBIT*		*		*		*			*	
		*				*					*ER A	LONE	*		*		*		*			*	
		*				*					*		*		*		*		*			*	
CA	-	*RE	SULTS	OF A	A 0.0	3*0	.03-	-SCA	LE AX-	-131	*DETE	RMINE PE	RFORM*	FORCE	*0.03	/	*B	DEING /	*R	.D.	KNUDSEN, J.	*DMS-DI	R-2211
WT	-	* ~ S	CALE	AEROI	DYNAM	I *9	I - 1	1 (CA	RRIER)	MO.	*ANCE	.STABILI	TY,AN*		*0.15	-	*T	BCA -	*A	UGU	STYN, E. DIC	<*VOLUM	E 03
31			CHARA						·			NTROL CH			*0.70		*TI	RANSONIC W	/IND+S	ON/	BOEING CO.	*SEPT.	. 1975
5								-SCA	LE 45-			TICS OF			*			UNNEL			. SARVER	*	
-141.												ARRIER A			*		*				. LINDAHL	*	
,			R (MOD					,				DNF I GURA			*		*			DMS		*	
			19 I-									ESTIGATE			*		*		*	J		*	
			HAS								•	MIC CHAR			*		*		*			*	
			ORBI									CS OF TH			-							*	
			-0) (•										T		- -		_			<u>.</u>	
					_							MATED W			-				-			-	
		_	THE						•			RBITER,C			*		*		*				
			ONIC		IUNN	L*						ONE, AND	OKRII*		*		*		*			*	
			(CA5)	,		*					ER A	LONE	*		*		*		*			*	
_		*				*					*		*		*		*		*	_		*	
C							AUNC	CH V	EHICLE			RMINE IN			*0.02			DCKWELL/			. NICHOLS/RI		
TWT			E O.C		_									PRESSURE	*0.6	-	*A1				. EDWARDS	*VOLUM	
:3	/	*88	-OTS	INTE	GRATE	D*					*CE-PI	RESSURE	DISTR*		*1.4		* 1	1-FOOT TRA	NS0*-	DMS		*OCT.,	1976
80		*SP	ACIE S	HUTTI	LE	*					*IBUT	IONS. EL	EVON *		*		*N	IC WIND TU	JNNE *			*	
-147,	632	*VE	HICLE	JET-	-PLUM	E*					AND I	RUDDER H	INGE *		*		*L	(UNITARY)	*			*	
•		*M0	DEL I	N TH	E NAS	*					*MOME!	NTS, AND	WING*		*		*		*			*	
			AMES									VERTICAL			*		*		*			*	
		•	TER 1			-						OT BENDI			*		*		*			*	
			ITARY									TORSIONA			*		*		*			*	
			NNEL			*						DUE TO			*		*		*			*	
		*		,	-,	*					_	RB PLUME			*		*		*			*	
		*				*					*RACT		*****		*		*		*			*	
		•				-						10143	Ξ				*					•	
		-				~					•		*		-		~		-			-	

							TUNNEL TEST	· / '		- ROCES								19
	*		*			*		*		*MODEL		*		*		GNIZANT	* BAS	
TEST			*		GURATIONS		TEST		TYPE OF				TESTING	*		ST DMS	*PUBLICA	
ID	* 	REPORT TI	TLE *		TESTED	* ·	PURPOSE	* 	TEST	*MACH	RANGE	: * 	AGENCY		PE	ERSONNEL	*OR COM	MENIS
RC	- *]	NVESTIGATI	ONS OF*L	AUNCH			ERMINE INTE			*0.020						NICHOLS/RI		
1TWT	- *1	THE 0.020-S	CALE *			*TED	VEHICLE SU	RFA*P	RESSURE				c -			EDWARDS	*VOLUME	
23	/*8	88-075 INTE	GRATED*				PRESSURE DIS			*1.4			-FOOT TRANS		MS		*OCT.,	197
A80	* 5	SPACE SHUTT	LE *			*IBU	TIONS, ELEV	* NC		*			C WIND TUNN				*	
R-147,	633*\	/EHICLE JET	-PLUME*				RUDDER HING		•	*		*L	(UNITARY)	*			*	
	**	MODEL IN TH	E NAS *			*MOM!	ENTS, AND W	ING*		*		*		*			*	
	/	A/AMES RESE	ARCH C			*AND	VERTICAL-T	AI *		*		*		*			*	
	* [ENTER 11X11	-F00T *			*L R	OOT BENDING	*		*		*		*			*	
	*t	JNITARY PLA	* DNIW N			*AND	TORSIONAL I	*MOM		*		*		*			*	
	*1	TUNNEL (IA8	(0) *			*ENT	S DUE TO MP	\$ A*		*		*		*			*	
	*		*				SRB PLUME II	NTE*		*		*		*			*	
	*		*			*RAC	TIONS	*		*		*		*			*	
	*		*			*		*		*		*		*	_		*	
RC			_		VEHICLE 5		ERMINE INTE			*0.020			•			NICHOLS/RI		
1TWT		THE 0.020-S					VEHICLE SU		RESSURE		-		C			EDWARDS	*VOLUME	
23		38-OIS INTE					PRESSURE DI			*1.4			-FOOT TRANS		MS		*OCT.,	197
A80		SPACE SHUTT					TIONS, ELEV			*			C WIND TUN	NE *			*	
R-147,		EHICLE JET					RUDDER HIN			*		*L	(UNITARY)	*			*	
		MODEL IN TH					ENTS, AND W			*		*		*			*	
		A/AMES RESE					VERTICAL-T			*		*		*			*	
		ENTER 11X11					OOT BENDING			*		*		*			*	
		JNITARY PLA					TORSIONAL			*		*		*			*	
	*	TUNNEL (IA8	10) *				S DUE TO MP			*		*		*			*	
	*		*				SRB PLUME I	NTE*		*		*		*			*	
	*		*			*RAC	TIONS	*		*		*		*			*	
	*		*			*		*		*		*		*			*	
RC					VEHICLE 5		ERMINE INTE			*0.020						NICHOLS/RI		
1TWT		THE 0.020-5					VEHICLE SU		RESSURE		-		C -			EDWARDS	*VOLUME	_
)23		88-OTS INTE					PRESSURE DI			*1.4			-FOOT TRANS		MS		*OCT.,	197
08A		SPACE SHUTT					TIONS, ELEV		*	*			C WIND TUN	NE.*			*	
R-147,		VEHICLE JET					RUDDER HIN			*		* L.	(UNITARY)	*			*	
		MODEL IN TH					ENTS, AND W			*		*		*				
		A/AMES RESE					VERTICAL-T			*		*		-			*	
		ENTER 11X11					OOT BENDING			*				.			*	
		JNITARY PLA					TORSIONAL			*				-			*	
	*	TUNNEL (IAE	*				S DUE TO MP			*		-		*			→	
	<i>*</i>		*				SRB PLUME I TIONS	HICT		*		- -		*			*	
	<i>*</i>					TRAC	1 101/2	*		*		*		*			*	
	. *		*			•		7		7		-		••			-	

						WIND	TUNNEL TE	ST /	DMS DATA	PROCES	SING				19
	*			*		*		*		*MODEL	 -	*	*	COGNIZANT	* BASIC
TEST	*			*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATION
ID	*	REPO	RT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
c ·	- *D!	F C 111 T 1	S OF THIVE	CT + 1	4OC MODIFIED SPA	*0PT	ATM UVDEDS	ONIT C+E	OPCE	*0.004	. /	*ROCKWELL/	*D.	I HAWTHODNE /	'RI*DMS-DR-2214
					E SHUTTLE ORBITE				UKCE	*19.8	•	*LARC -			*APRIL. 197
31	_				MODEL 74-0		ERAL-DIREC			*19.8				G. MCDONALD	* ************************************
9	-		CONFIGURA	_	MODEL 74 0		STABILITY			*		*ROGEN TUNNE			*
_			ACE SHUTTI				TROL CHARA			*		*	-L - D	.5	*
.4.,0			E ORBITER				ICS OF THE			*		*			•
			(74-0) IN				D SSV CONF			*		•	<u>.</u>		•
			A/LANGLEY				DN IN AN II					•	.		
			H CENTER				Y DIATOMIC			-			-		
			IC NITROG			*IUM		MEDT		<u>.</u>		- -			•
			(OA89)	-147		TIUM		7		-			-		Ţ
	* ()	DIVINCE	(UAGS)	-		-				-		- -	*		•
, .	•	0050	WING SHOE	40+5	SV ORBITER CONF	+70	TAMESTICAT	. TU+0	ODCE	*4.6	_	*LARC /	*DEA	IADD CDENCED	JR*DMS-DR-2215
					JRATION 140A/B-0				UKCE	*4.6					
•	_				DIS SCALE					*4.0				R.L. STALLING LARC:T.C. P	
8	•		AERODYNA		JID SCALE		TER BOUNDAI R CHARACTEI			-		*D TUNNEL	WINTUK.		UP+
	_		OBTAINED	_			AT ANGLES			<u>.</u>		*D IONNEL		H. LINDAHL	<u>.</u>
144,5			OBTAINED	-			ACK FROM -			-		*	*-D1		•
		_	OF THE SS	-			DEGREES AT			-		*	*-0*	15	* *
			R CONFIGUR				H NUMBER O			*		* 			*
			40A/B IN							# _		* *	*		*
			ASWT AT A				HE EFFECT (_		.	<u>.</u>		.
							E GRIT WER			*		*	*		.
		LASS)	MBER OF 4.	. 6*			TIGATED PLU			*		*	*		*
	*()	LACO		*			CTS OF LARG			*		*	*		*
	*			*			TIVE ELEVO			*		*	*		*
				*			CTION ON LI			*		*	*		*
	*			*			SEPARATION	N. *		*		*	*		*
_	*	- C T.		*	.	*		*		*	. ,	*	*		*
		-	S OF AEROT		KB		AIN AERODY		IEAI - I RANS		-	*MSFC /		•	FC*DMS-DR-2216
			VAMIC HEAT	_			EATING DATA	A UN*		*3.7		*LARC -		.DAVIET	*AUGUST, 197
5			T ON A O.C			*SRB		*		*3.7		*UNITARY PLA	IN W*-DN	IS	*
2F			E MODEL SO			*		*		*		*IND TUNNEL	*		*
141,80			KET BOOSTE			*		*		*		*	*		* '
			NASA/LAR			*		*		*		*	*		*
			Y PLAN WIN			*		*		*		*	*		*
	*D	TUNN	EL (SH12F)	*		*		*		*		*	*		*
	*			*		*		*		*		*	*		*

						WIND	TUNNEL TEST	/	DMS DATA	PROCESSING				19
	*			*		*		*		*MODEL	 *	*	COGNIZANT	* BASIC
TEST	*			*	CONFIGURATION:	S *	TEST	*	TYPE OF	* SCALE	* TESTING	*	TEST DMS	*PUBLICATION
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
TBCA		EDODVALA	uto neci	1 +0	.03-SCALE 45-0	H+ODB	TTED CONETC	ID 4 + I	CODOS	* 0.003 .	*BOETNO /	 T	DZTUBALA V	ES*DMS-DR-2217
BTWT					DIFIED SSV ORB				FURCE	*R 0.003 /				LLI*VOLUME O1
1431					R 140A/B		CARRIER MODE						M. PETROZZI	
CA20					.03-SCALE 747						*TUNNEL		R. MULLEN,	
					RIER MODEL		IDE SIX-COMP			*0.00	* 10141455		AEROSPACE	*
OK 141,		UNNEL U			KIEK MODEL		FORCE AND N			*	*		A. SARVER	*
		O-SCALE	-				DATA FOR EA			*	*		H. LINDAHL	*
		THE COL					ICLE IN PROX			*	*	*-D		*
	-	N 140A/					Y TO THE OTH	-		*	*	*	1113	*
		D) SSV					A MATRIX OF			*	*	*		*
		ODEI. NO					CONDITIONS			*	*	*		*
		D THE B	•				O DETERMINE			*	*	*		*
		ARRIER					ER TARE EFFI			*	*	*		*
		AX 131		*			O OBTAIN SU			*	*	*		*
	*	AX 101	3 1 1,	*			FREE AERODY			*	*	*		*
	*			*		*ICS		*		*	*	*		*
	*			*		*	•	*		*	*	*		* .
TBCA	- ∗ ∆	FRODVNA	MTC RESI	UL ∗O	.03-SCALE 45-0	M*ORR	TTER CONFIG	Ι ΡΔ*Ι	FORCE	* 0.003 .	*ROFING /	*T.	DZTUBALA. V	ES*DMS-DR-2217
BTWT					DIFIED SSV ORB					*R 0.003 /				LLI+VOLUME 02
1431					R 140A/B		CARRIER MODI						.M. PETROZZI	
CA20					.03-SCALE 747						*TUNNEL		R. MULLEN,	
					RIER MODEL		IDE SIX-COM			*	*		AEROSPACE	*
		UNNEL U					FORCE AND !			*	*	*D.	A. SARVER	*
		O-SCALE				*ENT	DATA FOR E	CH*		*	*	*R.	H. LINDAHL	*
	*F	THE CO	NF I GURA	T I *		*VEH	ICLE IN PRO	(I *		*	*	*-0	MS	*
	0	N 140A/	B (MODI	FI		*MIT	Y TO THE OTH	łER∗		*	*	*		*
	E	D) SSV	ORBITER	(*AT	A MATRIX OF	T *		*	*	*		*
	* M	IODEL NO	. 45-0)	A *		*EST	CONDITIONS	AN*		*	*	*		*
	N	D THE B	EDING 7	47		*D T	O DETERMINE	OR*		*	*	*		*
	C	ARRIER	(MODEL I	NO		*BIT	ER TARE EFFI	CT*		*	*	*	•	*
	*.	AX 131	9 I-1)	*		*S T	O OBTAIN SU	*09		*	*	*		*
	*			*		*RT-	FREE AERODY	*MAI		*	*	*		*
	*			*		*ICS	•	*		*	*	*		*
	*			*		*		*		*	*	*		*

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									PROCESSING							
	*		*		*		*		*MODEL	*		*	COGNIZANT		BASI	
TEST	*	DCD00T TITLE		FIGURATIONS		TEST		TYPE OF			TESTING	*	TEST DMS		BLICA	
ID	-	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH RANG	Ł*	AGENCY	*	PERSONNEL	*UR	COMM	EN15
													- 			
TBCA	- ∗ Δ	ERODYNAMIC RES	UL *0.03~	SCALE 45-0 N	#ORRT	TER CONFIG	IRA*F	ORCE	* 0.003 .	*RC	DEING /	*T	DZIUBALA,V. E	S*DM	IS-DR-	2217
TWT		S OF A SEPARAT							*R 0.003 /				RZA.R. L. GILL			
1431		TEST(CA20) CO				ARRIER MOD			*0.30 -				M. PETROZZI.F			1976
A20	-	CTED AT THE BO		•					*0.60		UNNEL		R. MULLEN BOE			
R-141,	846*N	G TRANSONIC WI	ND*RRIER	MODEL	*ROVI	DE SIX-COM	PON*		*	*			AEROSPACE	*		
-	*T	UNNEL USING O.	0 *	*	*ENT	FORCE AND I	*MON		*	*		*D.	A. SARVER	*		
	3	O-SCALE MODELS	0		*ENT !	DATA FOR E	ACH*		*	*		*R.	H. LINDAHL	*		
	F	THE CONFIGURA	TI		*VEHI	CLE IN PRO	(I *		*	*		*-DN	AS	*		
	0	N 140A/B (MODI	FI		*MITY	TO THE OT	fER*		*	*		*		*		
	E	D) SSV ORBITER	: (*AT A	MATRIX OF	T *		*	*		*		*		
	M	ODEL NO. 45-0)	A		*EST	CONDITIONS	AN*		*	*		*	•	*		
	N	D THE BEDING 7	47		*D TO	DETERMINE	OR*		*	*		*		*		
	C	ARRIER (MODEL	NO			R TARE EFF		•	*	*		*		*		
	*.	AX 1319 I-1)	*		*S TO	OBTAIN SU	*09°		*	*		*		*		
	*		*			REE AERODY!	*MAI		*	*		*		*		
	*		*		*ICS.		*		*	*		*		*		
	*		*		*		*		*	*		*		*		
EDC		RESSURE AND HE				BTAIN BASI		EAT-TRANS			SFC /		G. SILER, A.			
WTF	-	RANSFER TESTS				NG AND PRES			*1.10		EDC -				PΤ.,	1977
5A		SULTS ON THE				ISTRIBUTION	1 D*		*				R. CARROLL/MN	IC*		
H1F		CE SHUTTLE O.C			*ATA	ON ET	*		*		IND TUNNEL (I			*		
R-151,		SCALE EXTERNAL			*		*		*	*)		*-DN	AS	*		
		NK AT MACH 16	IN*	•	*		*		*	*		*		*		
	*A	EDC TUNNEL F	*		*		*		*	*		*		*		
	*		*		*		*		*	*		*		*		

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							WIND	TUNNEL TEST	/	DMS DATA	PROCES	SSING					200
	*				*		*		*		*MODEL		 *	*	COGNIZANT	* BASI	C
TEST	*				*	CONFIGURATIONS	*	TEST	*	TYPE OF			* TESTIN	1G *	TEST DMS	*PUBLICA	TIONS
ID	*	REPOR	T TIT	LE	*	TESTED	*	PURPOSE		TEST		RANGE	* AGENCY				ENTS
RC - 37SWT -	- *E /*P **A *******************************	ESULTS STIGAT LUME E N O.O1 ODEL (HE SPA LE IN -FOOT ASA/AN WIND	OF ATOM CONTROL OF SHATED THE STATED CONTROL OF SHEET CON	AN IDF JUSTS ON LETS O	11V*L 2T* 11 * 10F* 11 * 11 * 11 * 11 * 11 * 11 * 11 * 11	AUNCH VEHICLE 5	*DEF *RES *NT *ND *MAT *FIE *2.5 *WIT *CKE	INE THE BASE SURE ENVIRONI OF THE FIRST SECOND STAGE ED VEHICLE IN UPERSONIC FLU LD FROM MACH O THROUGH 3.14 H SIMULATED IT ENGINE EXH. PLUMES. DETER	P*F ME*P A* * * * * * * * * * * * * * * * * * *	ORCE	*0.010 *2.50 *3.50	 D / -	*ROCKWELL *ARC *8-FOOT B	./ *P. - *I BY 7-FO*M.	J. HAWTHORNE	E/R*DMS-DR-:	2219 01
	*8	2C)			*		-	PRESSURE EN			*		* '	*		*	
	*				*			MENT OF THE			# 		*	*		*	
	*				*			ER AT VARIOU			*		*	*		*	
	*				*			IT PORT LOCAT	10*		*		*	*		*	
	*				*		*NS.		*		*		*	*		*	
	*_			.	*		*		*		*	_ ,	*	*		*	
7SWT -	- _. *E	ESULTS STIGAT LUME E	ION (OF J	ET*		*RES	INE THE BASE SURE ENVIRON OF THE FIRST	ME*F	PRESSURE	*0.010 *2.50 *3.50	-	*ROCKWELL *ARC *8-FOOT E	- *I	J. HAWTHORNI	E/R*DMS-DR- *VOLUME *APRIL,	02
A82C		N 0 01						SECOND STAGE	*		*		*OT SUPER	RSONIC *-D	MS	*	
2-144.59								ED VEHICLE I			*	•	*WIND TU	NNEL (U*		*	
		HE SPA						UPERSONIC FL			*		*NITARY)	*		*	
		INTEG	_					LD FROM MACH			*		*	*		*	
		LE IN						O THROUGH 3.			*		*	*		*	
		-FOOT						H SIMULATED			*		*	*		*	
		ASA/AN						T ENGINE EXH			*		*	*		*	
		WIND						PLUMES. DETE			*		*	*		*	
		2C)		(*			PRESSURE EN			*		*	*		*	
	*	,			*			MENT OF THE			*		*	*		*	
	*				*			ER AT VARIOU			*		*	*		*	
	-				*			IT PORT LOCAT			*		*	*		*	
					*		*NS		* U *		-		•	*		*	
					.		*142	•	-		-		-	*			

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			WIND TUNNEL TEST	DMS DATA	PROCESSING			201
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS	* TEST	* TYPE OF	* SCALE	* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE	* AGENCY	* PERSONNEL	*OR COMMENTS
LARC	- *SPACE SHUTTLE OF	R*140 A/R SDACE SH	U*EFFECTS OF WING F	*EUDCE	*0.01 /	*LARC /	*W.P.PHILLIPS/LAR	C*DMS-DP-2220
	- *ITER TRIMMED CEN	- ·	*LANFORM FILLET. (•	*D. E. POUCHER	*VOLUME 08
6458	/*ER-OF-GRAVITY EX		*ANARD, AND FUSELA			*20-INCH HYPERS		*DEC. 1984
LA52	*ENSION STUDY: VO		*GE FOREBODY CAMBE			*ONIC TUNNEL (N		*
TM-X	*UME VIII - EFFEC		*R MODIFICATIONS			*ACH 6)	*	*
72661	*S OF CONFIGURATI		*N THE AERODYNAMIC		*	*	*	*
72001	*N MODIFICATIONS		*CHARACTERISTICS			*	*	*
	*N THE AERODYNAM	•	*CHARACTERISTICS		_	+ +	-	<u>.</u>
	*CHARACTERISTICS		Ī.	.	-	+ -	-	Ţ
			<u>.</u>	-	T	-	.	*
	*OF THE 140 A/B (*	*	.	*	*	
	BITER AT A MACH	N .			*	.	*	*
	*UMBER OF 5.97	*	*	*	*	* .	*	*
101.40	*	*	*	*	* 0405 /	*	*	*
			O+TO DEFINE ORBITER		-	•	*R.B.RUSSELL/ R.	
			L*WHEEL WELL PRESS				*.	*JULY, 1975
737	/*ICLE 140C CONFIC	- •	*URE LOADING AND I				*R.C. MENNELL/ R.	*
DA 143	*RATION ORBITER		*TS EFFECT ON LAND		*	*TUNNEL	*I.	*
CR-141,5	48*(MODEL 16-0) WHE		*ING GEAR THERMAL		*	*	*D. A. SARVER	*
	*L WELL PRESSURE	•	*INSULATION; TO IN		*	*	*W. B. MEINDERS	*
	*OADS IN THE ROCK		*VESTIGATE THE PRE		*	*	*-DMS	*
	*ELL INTERNATIONA		*SSURE ENVIRONMENT	「 *	*	*	*	*
	*7.75 X 11 FOOT V		*FOR THE HORIZONTA	\ *	*	*	*	*
	IND TUNNEL (OA1	14	*L FLIGHT NOSE PRO)*	*	*	*	*
	*3)	*	*BE AND AIR VENT D)*	*	*	*	*
	*	*	*OOR PROBES.	*	*	*	*	*
	*	*	*	*	*	*	*	*
LEDC .	- *RESULTS FROM A C	CO*B25C10M4F10E26R5	V*RE-ENTRY CONVECTI	*HEAT-TRANS	*0.0175 /	*ROCKWELL/	*B.J. HERRERA/ROC	K*DMS-DR-2222
HWTB .	- *NVECTIVE HEAT-TR	RA*7W116	*VE HEAT TRANSFER	*	*8.0 -	*AEDC -	*WELL INTERNATION	A*VOLUME 01
57A	/*NSFER-RATE DISTR	8I*	*RATES ON THE ORBI	*	*8.Q	*HYPERSONIC WIN	I * L	*OCT., 1976
H49B	*BUTION TEST ON A	\ *	*TER	* .	*	*D TUNNEL (B)	*J. E. VAUGHN	*
R-147,6	26+0.0175 SCALE MOD	DE*	*	*	* .	*	*-DMS	*
•	*L(22-0) OF THE R	RO*	*	*	*	*	*	*
	*CKWELL INTERNATI		*	*	*	*	*	*
	*NAL VEHICLE 4 SP		*	*	*	*	*	*
	*CE SHUTTLE CONFI	• •	*	*	*	* .	*	*
	*URAT (ON IN THE A		*	*	*	*	*	*
	*DC-V (F TUNNEL B)	_	*	*	· ·	*	*	*
	*H49B)	*	*	*	*	*	±	*

		WIND TUNNEL	TEST / DMS DA	TA PROCESSING			202
	* *	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	* * * CONFIGURATIO	NS * TEST	* TYPE		E* TESTING	* TEST DMS	*PUBLICATIONS
ID		* PURPOS			E* AGENCY	* PERSONNEL	*OR COMMENTS
AEDC	- *RESULTS FROM A CO*B25C10M4F10E26				•	*B.J. HERRERA/RI	
HWTB	- *NVECTIVE HEAT-TRA*7W116	*VE HEAT TRA		*8.0 -	*AEDC -	*WELL INTERNATION	
57A	/*NSFER-RATE DISTRI*	*RATES ON TH	E OKRI*	*8.0	*HYPERSONIC W		*NOV., 1976
0H49B	*BUTION TEST ON A *	*TER	*	*	*D TUNNEL (B)		*
CR-147,	,627*O.0175 SCALE MODE*	*	*	*	*	*-DMS	*
	L(22-0) OF THE RO	*	*	*	*	*	*
	CKWELL INTERNATIO	*	*	*	*	*	*
	NAL VEHICLE 4 SPA	*	*	*	*	*	*
	CE SHUTTLE CONFIG	*	*	*	*	*	*
	URATION IN THE AE	*	*	*	*	*	*
	DC-VKF TUNNEL B(O	*	*	*	*	*	*
	*H49B)	*	*	*	*	*	*
	* *	*	*	*	*	*	*
MSFC	- *REENTRY STATIC ST*ORB.W/ ATTACH	RIN*TO ESTABLIS	H STAT*FORCE	*0.4 -	*MSFC /	*J. D. JOHNSON/	MSF*DMS-DR-2223
14TWT	- *ABILITY CHARACTER*G, AFT RING, W/A			*4.45	*MSFC -	*C	*JULY. 1975
604	/*ISTICS OF A .0054*W/O PROTUBERAN			*		ON*S. C. PRAHARAJ	- •
SABF	*79 SCALE MODEL 14*, NOSE CAP	*B DURING RE		*		EL*. F. BRADDOCK/	
	,549*6-INCH SOLID ROCK*ORB.W/ ALL PRO		*	#	*	*R. B. LOWE	*
30 141,	*ET BOOSTER TESTED*ERANCES:	*	*	*	*	*-DMS	*
	*IN THE NASA/MSFC *ORB.W/O HEAT S	U1C+	*	*	•	* DM3	*
	*14X14 INCH TWT *LD	+	- T	Ţ.	Ţ	<u> </u>	*
	+ 14X14 INCH INT FED	- T		•			<u> </u>
LARC	- *RESULTS OF A DRAG*72-OTS (ORB.,	ET #INVESTIGATI	ON OF ACORDE	* 0.010	/ *LARC /	*BERNARD SPENCE	D 1+DMS-DD-2224
LARC	- *REDUCTION INVEST *SRM)				•	*R./LARC	•
		*SPACE SHUTT		*0.6 -	*LARC -	•	*MARCH, 1978
699	/*IGATED ON AN O.O1*	*NCH VEHICLE		*1.2		R*GEORGE M. WARE	/LA*
8TPT	- *O-SCALE MODEL OF *	*REDUCTION A		*	*ESEARCH CENT		*
LA56	*THE SPACE SHUTTLE*	*NUMBERS 0.3	15 TO 1*	*		ON*J. W. BALL	*
CR-147	.650*VEHICLE 72-DTS L *	*.20	*	*		TU*G. G. MCDONALD	*
•	*AUNCH CONFIGURATI*	*	* *	*	*NNEL	*-DMS	*
	*ON TESTED IN THE *	*	*	*	*	*	*
	LARC 8-FOOT TRANS	*	*	*	*	*	*
	ONIC PRESSURE TUN	*	*	*	*	*	*
	*NEL FOR THE MACH *	*	*	*	*	*	*
	*RANGE OF 0.35 TO *	*	*	*	*	*	*
	*1.20 (LA56) *	*	*	*	*	*	*
	* *	*	*	*	*	*	*

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)							
				;				,		•					
					WIND	TUNNEL TE	ST / 1	OMS DATA	PROCES	SING					203
	*		*		*		*		*MODEL	. 	*	*	COGNI ZANT	* BASIC	:
TEST ID	*	REPORT TI	* TLE *	CONFIGURATION TESTED	S * *	TEST PURPOSE	*	TYPE OF TEST		SCALE	-	G * *	TEST DMS PERSONNEL	*PUBLICAT *OR COMME	CIONS
DC -	- ±DU	JASE CHANG	E DATN+N	NODEL 21-0, LIN	EC+TN E	VALUATE A	EDOD+U	EAT-TDAN	S+0 047	75 /	*DT	/ +u	. QUAN.C. W.	CDA+DMS-DD-1	2225
				L70-000139		IC HEATIN		EAT TRAIN	3*0.01 <i>1</i> *8		*AEDC		G/RI	*MARCH.	
352		ATE EFFEC	_			S OF TILE	_		*8				A. SARVER	*	
I4C	*TP	S TILES OF	HEAT*			TPS. TILE			*				M. MOSER JR	! . *	
-141,50	05 * I N	IG RATES DI	F THE *		*P DE	PTH AND O	RIEN*		*		*	*-[OMS	*	
	R0	CKWELL SPA	ACE SH		*TATI	ON TO THE	FLO*		*		*	*		*	
	UT	TLE ORBIT	ER (TE		*W WE	RE INVEST	IGAT*		*		*	*		*	
		OF4C, MOI	DEL 21*		*ED.		*		*		*	*		*	
	*-O))	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
				PACE SHUTTLE V			ALIZ*F0	DRCE	* 3.75		*RI /		.J.DAILEDA/RO		
	_			CLE CONFIGURAT		N	*		* 5.03		*AEDC	- *EI		*FEB.,	1975
	• .			I 3 MODEL 32-OT			*		*				R.MARTINDALE	/AR*	
\A		ACE SHUTTI		PACE SHUTTLE O			*		*		*D TUNNEL			*	
31B				TER MODEL 52-0	*		*		*		*		. A. SARVER	*	
141,50		-O IN THE			*		*		*		*		G. MCDONALD	*	
		F TUNNEL A	* AI) #		*		*		*		* -	* -L	DMS	*	
	*61	В)			*				*		*	*		*	
	 	CILITE OF I	* 	DD /U/FT AND C	* 	OTTUENECC	~ ^- *	2005	* 0.00		* *D7	, * , *F	C ALLEM/D	7 +DUC DD (2007
				RB./W/ET AND S				JKCE	* 0.00 *0.60		*MSFC		C. ALLEN/R.		
				'40TS; ORB. W/E ND SRB'S 770,					*1.96		*14-INCH		.B. WATSON	*NOV.,	1975
71		TRUSONIC 1				RSIONAL A			*1.90		*IC WIND 1		JM 3	*	
		A .004 S		13		NG MOMENT					* TO MIND	I CIVINEL *		*	
141,00		EL SPACE				DNIC + SU			*		*			*	
		INTEGRATE				C MACH NO			*		*	*		*	
		E 5 (MODE				NTERED DU			*		*	*		*	
		74-TS) TO			*LAUN		*		*		*	*		*	
		WING LOAD			*		*		*		*	*		*	
		G ASCENT			*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
≀C -	- *		*		*		*F(DRCE	*		*LARC /	/ *D.	B. WATSON	*DMS-DR-2	2228
٧T -	· *		*		*		*		*		*LARC -	- *-[MS	*TO LRC	
92/1117	7/*		*		*		*		*		*UNITARY F	PLAN W*		*	
17	/*		*		*		*		*		*IND TUNNE	EL *		*	
46A/B	*		*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	

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				WIND	TUNNEL TEST	DMS DATA	PROCES	SING					204
	*	*		*		*	*MODEL		*	*	COGNIZANT	* BASI	C
TEST	*	*	CONFIGURATIONS		TEST	* TYPE OF			* TESTING		TEST DMS	*PUBLICA	
ID	* REFORT TITLE	*	TESTED	*	PURPOSE	* TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMM	MENTS
LARC	- *RESULTS OF FLO	W. W.C	SV 1404/B	+10	DETERMINE SEPA	+E000E	+0 01E	. ,	*ROCKWELL/	. 11	E. NICHOLS/RI	*DNS-DD-	
	- *ISUALIZATION I		3V 140A/B		ION ZONES, FLO		*0.6		*LARC -		A. SARVER	*FEB	
687	/*STIGATIONS ON				ECIRCULATION F		*1.2		*8-FOOT TRANS		-	*	
UA 102	*.015-SCALE MOD				ONS, AND POTEN		*		*IC PRESSURE			*	
	OB*ED CONFIGURATI				L VENTING AND		*		*NNEL	*	. •	*	
	*140A/B SPACE S				TAMINANT-INGES		*		*	*		*	
	*TLE VEHICLE OR			_	N PROBLEM AREA		*		*	*		*	
	ER (MODEL 36-C) I		*S		*	*		*	*		*	
	N THE LANGLEY	RES		*		*	*		*	*		*	
	*EARCH CENTER	*		*		*	*		*	*		*	
	*	*		*		*	*		*	*		*	
HWTB	- *RESULTS OF OIL - *OW VISUALIZATI	ONS*D	, MODEL 52-OT	*ROD	YNAMIC FLOW PA	\ *	*0.010 *7.95	-	*ROCKWELL/ *AEDC -	*D.	J. DAILEDA/RI A. SARVER	*DMS-DR- *FEB.,	-2230 1975
VA422	/*TESTS OF AN O.	-			RNS USING OIL		*7.95		*HYPERSONIC W			*	
[A17B	*O-SCALE MODEL	•		*FL0	W TECHNIQUES	*	*		*D TUNNEL (B)	*-DN	15	*	
JR-141,5	O9*-OT) OF THE SP			*		*	*		*	*		*	
	*SHUTTLE ORBITE *TANK MATED AND			*		* 	*		*	*		*	
	*BITER CONFIGUR			*		*	*		*	*		*	
	*ONS IN THE AEC			-		*	*		*	*		-	
	*KF TUNNEL B (I			-		.	Ť		*	-		- -	
	*B)	A1/T		-		.	<u>.</u>		-	-		-	
	*	*	•	*		*	Ĩ		*	*		*	
ARC	- *RESULTS OF AN	TNV*I	AUNCH VEHICLE 5	*DEE	INE THE BASE I	*ENDCE	*0.010	h /	*ROCKWELL/	*P	J. HAWTHORNE/	P*DMS-DP-	-2231
	- *ESTIGATION OF		ABITOLL S		SURE ENVIRONM				*ARC -	*I	-	*VOLUME	
044	/*PLUME EFFECTS			_	OF THE FIRST	-	*2.20		*9-FOOT BY 7-	_		*APRIL.	
1 A 8 2 B	*AN O.O10-SCALE				SECOND STAGE		*		*OT SUPERSON			*	1370
	01*MODEL (75-0TS)	-			ED VEHICLE IN		*		*WIND TUNNEL	_		*	
	*THE SPACE SHUT				UPERSONIC FLO		*		*NITARY)	*		*	
	*E INTEGRATED V			_	LD FROM MACH		*		*	*		*	
	*CLE IN THE 9-				5 THROUGH 2.20		*		*	*		*	
	*7-FOOT LEG OF			*		*	*		*	*		*	
	*NASA/AMES UNIT			*		*	*		*	*		*	
	Y WIND TUNNEL	(IA		*		*	*		*	*		*	
	*82C)	*		*		*	*		*	*		*	
	•												

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NEL TEST / DMS DATA PROCESSING	205

	SIC
	CATIONS
RPOSE * TEST *MACH RANGE* AGENCY * PERSONNEL *OR CO	MMEN 12
THE BASE P*FORCE *0.010 / *ROCKWELL/ *P. J. HAWTHORNE/R*DMS-D	R-2231
ENVIRONME*PRESSURE *1.55 - *ARC - *I *VOLUM	
	. 1976
ND STAGE * * *OT SUPERSONIC *-DMS *	
EHICLE IN * * *WIND TUNNEL (U* *	
SONIC FLOW* * *NITARY) * *	
RDM MACH * * * * *	
IRDUGH 2.20*	
* * * * *	
* * * * *	
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* * * * *	
* * * * *	
RMINE BOUN*FORCE *0.004 / *ROCKWELL/ *M. E. NICHOLS/RI *DMS-D	
YER SEPARA* *O.60 - *MSFC - *D. A. SARVER *JUNE,	1975
D REGIONS * *2.75 *14-INCH TRISON*M. M. MOSER JR. *	
NTIAL APU * * *IC WIND TUNNEL*-DMS *	
RECIRCULA* * * *	
RING TRANS* * * * *	
D LOW SUPE* * * * *	
RE-ENTRY F* * * * *	
* * * * *	
* * * * * *	
RMINE EFFE*FORCE *0.35 - *LARC / *B. SPENCER, JR., *DMS-D	n_1022
VARIOUS CO* *1.20 *LARC - *G. M. WARE/LARC *JUNE.	
TIONAL COM* * *8-FOOT TRANSON*J. E. VAUGHN *	1377
ON TOTAL * * *IC PRESSURE TU*M. M. MOSER JR. *	
VEH. 5 * * *NNEL *-DMS *	
* * * * * *	
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			WIND TUNN	EL TEST / DMS	DATA PROCESSI	NG		206
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGU	RATIONS * T	ST * TYP		ALE* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITL	E * TES	TED + PUR	POSE * TE		NGE* AGENCY	* PERSONNEL	*OR COMMENTS
CALSPAN	- *WIND TUNNEL TH	EST *ORBITER W	ITH ELEV+OBTAIN V	SCOUS IN*FORCE	*0.010	/ *ROCKWELL/	*RICK BURROWS,J	OHN*DMS-DR-2234
			DY FLAP *TERACTIO	N EFFECTS*	*10.0 -	*CALSPAN -	*MARROQUIN/R.I.	*JULY, 1975
184-220	/*O-SCALE SPACE	SHU*DEFLECTIO	NS *ON STABI	_ITY DER *	*16.0	*48-INCH HY	PERS*C. E. ROGERS/C	ALS*
OA113	*TTLE ORBITER		*IVATIVES	OVER THE*	*	*ONIC SHOCK	TUN*PAN CORP.	*
CR-141,5	647*L 51-0 IN THE		*RE-ENTRY	MACH SPE*	*	*NEL	*D. A. SARVER	*
	*SPAN HYPERSON		*CTRUM TO	GETHER WI*	*	* .	*J. E. VAUGHN	*
	*HOCK TUNNEL (48 - I *		EREN PHOT*	*	*	*-DMS	*
	*NCH LEG)	*		RESSURE D*	*	*	*	*
	*	*		IZED TO E*	*	*	*	*
	*	*		FLOW SEPA*	*	*	*	*
	*	*		HENOMENA *	*	*	*	*
	*	* .	*	*	*	*	*	*
			IEAT SHIE*TO DETER			*MSFC /	- · · - · · · · · · · · · · · · · · · ·	MSF*DMS-DR-2235
			T SHIELD*DYNAMIC		*3.48	*MSFC -	*C	*NOV., 1975
611			W/HEAT *D MOMENT		*		ISON*W. F. BRADDOCK	/NS*
SA3OF			I NOZZLE ∗ON SRB N	DZZLE DU *	*	*IC WIND TU		*
CR-141,8	110*46-INCH SOLID		*RING REE	NTRY *	*	*	*V. W. SPARKS	*
	*KET BOOSTER N		*	*	*	*	*M. M. MOSER JR	*
	*473 IN MSFC 1		*	*	*	*	*-DMS	*
	*14 INCH TRISO		*	*	*	*	*	*
	WIND TUNNEL (5A3O	*	*	*	*	*	*
	*F)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
UW			7 MATED *TO DETER			/ *BOEING /		EIN*DMS-DR-2236
LSWT			XTERNAL *OADS FOR		*.15 -	*UW -	*G	*DEC., 1975
1146	/*INVE: TIGATION			ATIONS A *	*.15		WIND*R.W.SENDER/BOE	ING*
CA11			7 ALONE *ND DETER		*	*TUNNEL	*D. A. SARVER	*
CR-141,8	35*BOEING 747 CA			S OF ET P*	*	*	*W. B. MEINDERS	*
	TERNAL TANK (ET INCID	*	*	*-DMS	*
	L AX1284 E-5)		•	PPORT STR	*	*	*	*
	BINATION IN T			ND 747 VE	*	*	*	*
	UNIVERSITY OF	-		TABILIZIN	*	*	*	*
	HINGTON AERON			ES ON STA .	*	*	*	*
	CAL LABORATOR		-	CONTROL A	*	*	*	*
	K. KIRSTEN WI	ND T	·	RMANCE OF*	*	*	*	*
	*UNNEL (CA11)	*	· •	OMBINATIO*	*	*	*	*
	*	*	*NS	*	*	*	*	*
	*	*	*		•		*	•

48HST - 184-120 0A93	*RES	EPORT TITLE	* * CONFIGURATIONS * TESTED			*								
ID	*RES	EPORT TITLE				*								
ID	*RES	EPORT TITLE				. TVI		*MODEL		* TECTING	*		ZANT	* BASIC
CALSPAN - 48HST - 184-120 DA93	*RES	EPURI IIILE	* 1691ED		TEST		PE OF		SCALE	-	•		DNNEL	*PUBLICATIONS
48HST - 184-120 0A93				* 	PURPOSE		EST 	*MACH		* AGENCY				*OR COMMENTS
48HST - 184-120 0A93		ULTS OF WIND T	*51-O	*TO DE	TERMINE EFF	E*FORCE	E	*0.010	,	*ROCKWELL/	*	d. d. DAI	ILEDA. J	.*DMS-DR-2238
I84-120 OA93	* UNIN	EL RCS INTERAC			F RCS JET/F			*9.60		*CALSPAN -		MARROQUIN		*NOV. 1976
0A93		N TESTS ON A O			ELD INTERAC			*10.75		*48-INCH HY				
CD-444 C4	-	O-SCALE SPACE			ON SSV AERO			*		*ONIC SHOCK				*
UK-141.84	7*SHU	TTLE ORBITER M	•	*STABI	LITY AND CO	N*		*		*NEL	*	V. W. SPA	ARKS	*
•	*ODE	L (51-0) IN TH	*	*TROL	CHARACTERIS	T*		*		*	*	V. W. SPA	ARKS	*
	*E 0	ALSPAN CORPORA	*	*ICS A	T VARIOUS H	Y*		*		*	*	-DMS		*
	*TIO	N 48-INCH HYPE	*	*PERSO	NIC MACH AN	D*		*		*	*			*
	*RS0	NIC SHOCK TUNN	•	*REYNO	LDS NUMBERS	*		*		*	*			*
	*EL	1	*	*		*		*		*	*	t .		*
	*	:	*	*		*		*		*	*	•		*
LARC -	*	!	*	*		*FORCE	Ε	*		*LARC /	. *	J. E. VAL	JGHN	*DMS-DR-2239
8TPT -	*	į	+	*		*		*		*LARC -	*	D.B. WATS	SON	*TO LRC
676	/*	1	*	*		*		*		*8-FOOT TRA	NSON*	-DMS		*
L A38B	* .	2	k	*		*		*		*IC PRESSUR	E TU*	•		*
	*	,	•	*		*		*		*NNEL	*	t		*
	*	1	*	*		*		*		*	*			*
			*60-0TS THERMOCOU				_			*RDCKWELL/		_		W*DMS-DR-2240
		IGATION OF THE			R DATA ON S	-		*4.5		*AEDC -		. H. DYE		*APRIL, 197
		CE SHUTTLE IN			RATED VEHIC			*		*SUPERSONIC				*
IH41A		RATED VEHICLE			RING ASCENT			*		*D TUNNEL (4N	*
CR-151,05		ODYNAMIC HEATI		*OF FL	IGHT PROFIL	E*		*		*	*	-DMS		*
		CHARACTERISTIC:		*		*	:	*		*	*			*
		BTAINED USING		*		*		*		*	*			*
		0.0175-SCALE		*		*		*		*	*	:		*
		EL 60-OTS IN T		*		*		*		*	*			*
		AEDC TUNNEL A		* .		*		*		*	*			*
		ING TESTS IH41		*		*	:	*		*	*			*
	*ANU	IH41A		*		*		*		*	*			*
AFDC -	-	TABLECTICATION .	MODEL CO O VELL	******	VECTIOATE E	*	TDANC	*	- /	*	*	n . ucc	00004/01	* DNC DD 0044
		ENTRY HEATING	*MODEL 60-3, VEH.	*TRY H		N+HEAI.	_	*0.017: *8.0		*ROCKWELL/ *AEDC -		J. E. VAL	•	*DMS-DR-2241 *VOLUME 01
–		THE 0.0175 SCA		* (K!	EATING	-		-o.u		*HYPERSONIC				*JULY. 1980
0H39		SPACE SHUTTLE		*	•	*		*		*D TUNNEL (-	*
		TER (MODEL 60		*		*		*		*	~ , +	J113		*
JA 100,45		IN THE AEDC U		*		*		*		*	*			*
	-	TUNNEL B	- k	*		*		*		*	*			*
	*		•	*		*		*		*	*			*
										•	-			

						WIND	TUNNEL TEST	r / r	OMS DATA	PROCES	SING				20
	*			*		*		*		*MODEL		*	*	COGNIZANT	* BASIC
TEST ID	*	REPORT	TITLE	* COI *	NFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF	* *MACH	SCALE RANGE		*	TEST DMS PERSONNEL	*PUBLICATION *OR COMMENTS
AEDC					L 60-3, VEH.		INVESTIGATE	EN*HI	EAT-TRAN	_		*ROCKWELL/		J. HERRERA/RI E. VAUGHN	*DMS-DR-224 *VDLUME 02
HWTB 74A			HEATING .0175 SCA			*161	HEATING	*		*8.0		*AEDC - *HYPERSONIC \			*JULY. 19
CH39		_	SHUTTLE			-		Ţ.		÷		*D TUNNEL (B			*
			(MODEL 50			*		*		*		*	, *	1113	*
ck 100,			HE AEDC U			*		*		*		*	*		*
		F TUNNEI		*		*		*		*		*	*		*
	*			*		*		. *		*		*	*		*
EDC	- *A	N INVES	FIGATIO	*MODE	L 60-3. VEH	*TO	INVESTIGATE	EN*H	EAT-TRAN	IS*0.017	5 /	*ROCKWELL/	*B.	J. HERRERA/RI	*DMS-DR-224
IWTB			HEATIN3		•		HEATING	*		*8.0		*AEDC -	*J.	E. VAUGHN	*VOLUME 03
74A	/*0	N THE O	.0175 SCA	*		*		*		*		*HYPERSONIC	WIN*G.	R. LUTZ	*JULY, 19
OH39	*L	E SPACE	SHUTTLE	*		*		*		5 *		*D TUNNEL (B) *-D	MS	*
CR-160,	492*0	RBITER	(MODEL 30	*		*		*		*		*	*		*
			HE AEDC U	*		*		*		*		*	*		*
	*K	F TUNNEI	L B	*		*		*		*		*	*		*
	*			*		*		*		*		*	*		*
AEDC					L 60~3, VEH		INVESTIGATE	EN*H	EAT-TRAN			*ROCKWELL/		J. HERRERA/RI	
HWTB			HEATING			*TR	/ HEATING	*		*8.0	-	*AEDC -		E. VAUGHN	*VOLUME 04
74A	•	_	.0175 SCA			*		*		*		*HYPERSONIC			*JULY, 19
DH39			SHUTTL:			*		*		*		*D TUNNEL (B) *-D	OMS	*
CR-160,	_		(MODEL GO			*		*		*		*	*		*
		•	HE AEDC U	*		*		*		*		*	.		•
	* N	F TUNNE	LB	* •		*		•		*		*	÷		*
ΛEDC	- *1	FDODVNIA	MIC RESIL	*52-0	τ¢	*T0	OBTAIN DATA	+ WT±F	OPCE	*0.010	, /	*ROCKWELL/	* * F	CHEE/RI	*DMS-DR-224
SWTA			SEPARATIO		13		THE SRB IN		ORCE	*4.5	•	*AEDC -		BURT/ARO	*VOLUME O1
ASA			S TEST ON				MITY TO THE			*		*SUPERSONIC			*MARCH. 19
[A111	•		SCALE MO				OVER A LARGE			*		*D TUNNEL (A		M. MOSER JR.	*
			OTS) OF T				INITIAL ANG			*		*		MS	*
			RATED SSV				ATTACK AND			*		*	*	•	*
	* I	N THE A	EDC/VKF	*		*ESI		*		*		*	*		*
			INCH SUP			*		*		*		*	*		*
	* E	RSONIC	WIND TUNK	*		*		*		*		*	*		*
	*E	L A (IA	111)	*		*		*		*		*	*		*
	*			*		*		*		*		*	*		*

							,						,
					WIND TUNNEL TE	EST /	DMS DATA	PROCESSIN	 ; G				209
	*		*		*	,		*MODEL	*			COGNIZANT	* BASIC
TEST ID	*	REPORT TITLE	*	CONFIGURATIONS TESTED	* TEST * PURPOSE	*	* TYPE OF * TEST			ESTING GENCY	*	TEST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
EDC	- *AF	ERODYNAMIC RES	IL*5	2-0TS	*TO OBTAIN DAT	ra wi*	FORCE	*0.010	/ *ROCY	KWELL/	*E.	. CHEE/RI	*DMS-DR-2242
WTA	- *T5	S OF A SEPARAT	.0*		*TH THE SRB IN	N PRO*	ı	*4.5 -	*AEDC	ა -	*R.	BURT/ARO	*VOLUME O2
3A	/*N	EFFECTS TEST)N*		*XIMITY TO THE	≟ 0/E*		*	*SUPF	ERSONIC WIF	N∗J.	. E. VAUGHN	*MARCH, 1976
A111		0.010-SCALE M			*T OVER A LARG			*	*D TU	JNNEL (A)		M. MOSER JR.	*
R-144,5		EL (52-OTS) OF			*ET INITIAL AN			*	*		* - DI	/MS	*
		E INTEGRATED S			*OF ATTACK AND	*SID د	•	*	*		*		*
		N THE AEDC/VKF			*ESLIP	*		*	*		*		*
	_	O-BY-40 INCH S			*	*	•	*	*		*		*
		RSONIC WIND TU	1N+		*	*	•	*	*		*		*
	*EL	L A (IA111)	*		*	*		*	*		*		*
	*		*		*	*		*	*		*		*
				MODEL 48-0/AX1318				* 0.0125 /		KWELL/	_	. E. VAUGHN	*DMS-DR-2243
				I-1 0.0125 SCALE				*0. 3 -	*ARC			H. LINDAHL	*JAN., 1976
80	•	TION OF A SPACE	1		*D FOR THE CAR			*0.7		FOOT TRANSC	-	√MS	*
A23A		HUTTLE ORBITEF/			*AND ORBITER S			*		WIND TUNNE	E*		*
R-144,5		7 CARRIER VEHIC			*RATELY AND MA			*	*L		*		*
		CONFIGURATION			*FOR PRE-LAUNC			*	*		*		*
		ESTABLISH A FR			*D FREE AIR DA			*	*		*		*
		-STREAM DATA BY	-		*ASE FOR PLANN	_		*	*		*		*
		FOR ALT SEPARY			*EPARATION TES			*	*		*		*
		ON INVESTIGATI			*F THE CARRIER			*	*		*		*
		UTILIZING A O.			*CONFIGURATION	1. *		*	*		*		*
		25-SCALE MODEL			*	*		*	*		*		*
		8-/OAX1318I-1)			*	*		*	*		*		*
		THE ARC 14-FOO			*	*		*	*		*		*
		IND TUNNEL (CA2	2 *		*	*		*	*		*		*
	*34	•)	*		*	*		*	*		*		*
_	*		*		*	*		*	*		*		*
				146-INCH WITH AND				*.40 -	*MSFC	•		F. BRADDOCK,	
				VITHOUT PROTUBER				*.45	*MSFC				*AUGUST, 1977
03		TATIC PRESSURE			*TIONS FOR THE			*		INCH TRISON			*
A28F		STRIBUTION OF T			*AT REENTRY AT			*	*IC W	JIND TUNNEL		M. MOSER JR.	*
R-151,0		0.00548 SCALE			*UDES AND FLIG	≟HT C*		*	*		*-DI	MS	*
		ACE SHUTTLE SC			*ONDITIONS	*		*	*		*		*
		ROCKET BOOSTER			*	*		*	*		*		*
	-	MSFC MODEL NUM 3			*	*		*	*		*		*
		468) DURING FE			*	*		*	*		*		*
		TRY IN THE NASA			*	*		*	*		*		*
		SFC 14 INCH TRI			*	*		*	*		*		*
	*0N	NIC WIND TUNNEL	<u>.</u> *		*	*		*	*		*		*
	*		*		*	*		*	*		*		*

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ID * REPORT TITLE * TESTED * PURPSE * TEST *MACH RANGE* AGENCY * PERSON ARC - *RESULTS OF AN INV*SPACE SHUTTLE VEH*TO DETERMINE LOCA*FORCE *0.030 / *ROCKWELL/ *M.R.NICHOL 11,97,87- *ESTIGATION TO DET*ICLE ORBITER 140A*L TOTAL AND STATI* *0.30 - *ARC - *. 094 /*ERMINE LOCAL FLOW*/B (MODIFIED) *C PRESSURE ENVIRO* *3.5 *11-FOOT, 9-FOO*J.C.MONFOR 0A161A/B/C*CHARACTERISTICS * *NMENTS FOR THE AI* * *T, 8-FOOT, UNI*D.W.HERSEY 0R-147,618*AT THE AIR DATA P* *R DATA PROBE LOCA* * *TARY WIND TUNN*W. B. MEIN	
ARC - *RESULTS OF AN INV*SPACE SHUTTLE VEH*TO DETERMINE LOCA*FORCE *0.030 / *ROCKWELL/ *M.R.NICHOL *11,97,87- *ESTIGATION TO DET*ICLE ORBITER 140A*L TOTAL AND STATI* *0.30 - *ARC - *. (0.30 - *ARC - *.	NNEL *OR COMMENTS
11,97,87- *ESTIGATION TO DET*ICLE ORBITER 140A*L TOTAL AND STATI* ()94	
CR-147,618*AT THE AIR DATA P* *R DATA PROBE LOCA* * *TARY WIND TUNN*W. B. MEIN	LS / R.I*DMS-DR-2245 *VOLUME 01 RT / ARC*SEPT 1976
-CR-147,618*AT THE AIR DATA P* *R DATA PROBE LOCA* * *TARY WIND TUNN*W. B. MEIN	
	*
ING AN O.O3O-SCAL	*
E MODEL (45-0) OF	*
THE SPACE SHUTTLE	*
*VEHICLE ORBITER *	*
CONFIGURATION 140	*
A/B (MODIFIED) IN	*
THE NASA AMES RES	*
EARCH CENTER UNIT	*
ARY PLAN WIND TUN	*
NEL ()	*
* * * * * *	*
ARC - *RESULTS OF AN INV*SPACE SHUTTLE VEH*TO DETERMINE LOCA*FORCE *0.030 / *ROCKWELL/ *M.R.NICHO	LS / R.I*DMS-DR-2245
11.97.87- *ESTIGATION TO DET*ICLE ORBITER 140A*L TOTAL AND STATI* *0.30 - *ARC - *.	*VOLUME 02
094 /*ERMINE LOCAL FLOW*/B (MODIFIED) *C PRESSURE ENVIRO* *3.5 *11-FOOT, 9-FOO*J.C.MONFOI	RT / ARC+OCT., 1976
OA161A/B/C*CHARACTERISTICS * **MENTS FOR THE AI* * *** *** ************************	
CR-147,619*AT THE AIR DATA P* *R DATA PROBE LOCA* * *TARY WIND TUNN*W. B. MEI	
ROBE LOCATIONS US	*
ING AN O.O3O-SCAL	*
E MODEL (45-0) OF	*
THE SPACE SHUTTLE	*
*VEHICLE ORBITER * *IGURATIONS * * * * *	*
CONF'GURATION 140	*
A/B (MODIFIED) IN	*
THE NASA AMES RES * * * * *	*
EARCH CENTER UNIT * * * * *	*
ARY PLAN WIND TUN * * * * *	*
NEL () * * * * *	*
* * * * * * *	*

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							r								/
		- 		WIND T	UNNEL TEST	 /	DMS DATA	PROCES	SSING						211
*		*		 *				*MODEI		*		*	COGNIZANT	* BAS	SIC
TEST * ID * R	EPORT TITLE	*	CONFIGURATIONS TESTED		TEST PURPOSE	*	TYPE OF TEST	*	SCALE	* TES	TING NCY	*	TEST DMS PERSONNEL		CATIONS
RC - *LOW	CHRONIC AED	O+W1	NG-BODY WITH VA	*EEEEV.	T OE DI ANEO:	D + E	ODCE	*.08	_	*LARC	,	*GE0	RGE WARE/NASA	*nwc-ni	2-2246
	AMIC CHARACTE				FORCE + MOMI		ORGE	*.30		*ARC	_		IGLEY	*JULY	
	ICS OF FIVE I		-		ARACTERISTI			*			OT PRESSU		NARD SPENCER/		
165 *REGI	ULAR PLANFORM	*		*S AS	A FUNCTION (0*		*		*RE TL	INNEL	*ASA	LANGLEY	*	
•	GS WITH SYSTE			*F RN/	L	*		*		*			. WATSON	*	
	CALLY VARYING			*		*		*		*		* -DM	IS	*	
	G FILLET GEOM			*		*		*		*		*		*	
	TESTED IN TH			*		*		*		*		*		*	
	A/AMES 12-FOO			*		*		*		*		* •		*	
	SSURE TUNNEL	*		*		Ŧ		* •		*		<u>.</u>		Ť	
*(LA	00)	Ŧ		-		-		*		-		*		*	
DC - *RESI	IIITS OF AN IN	V + M O	DEL 51-0 OF MOD	*TO DE	TEDMINE HVD	- T	ODCE	*0.010	· /	*ROCKV	7511/	*D	J. ELDER/RI	*DMS-DF	2-2247
· -			IED VEH. 4 ORB.				ONOL	*19	_ ′	*AEDC	-		E. VAUGHN	*JAN.	
			26 C9 E26 F7 M					*19			VELOCITY			*	
		- • -	N28 R5 V8 W116)			*		*			TUNNEL (F			*	
·	F THE SPACE S		,	*		*		*		*)		*		*	
•	LE ORBITER US			*		*		*		*		*		*	
*NG	A 0.01/ SCALE	*		*		*		*		*		*		*	
MODI	EL (51-0) IN	T		*		*		*		*		*		*	
HE	AEDC-VKF TUNN	E		*		*		*		*		*		*	
*L F		*		*		*		*		*		*		*	
*		*		*		*		*		*		*		*	
			OTS SPACE SHUT				IEAT-TRANS		•	*ROCKV	IELL/		H. DYE/RI	*DMS~D	
	SFER TESTS OF				INTERFERENC			*5.2		*ARC	-		K. LOCKMAN/AR	C*APRIL	, 1976
	.0175-SCALE S				NG DATA ON			*5.3			OOT HYPER			*	
	SHUTTLE VEHIC				XTERNAL TAN			*			WIND TUN	4*-DM	IS	*	
_	5 MODEL (60-0				E TANK ALONI			*		*NEL		*		*	
	IN THE NASA-A				DND-, AND F			*		*		*		∓	
	RESEARCH CENT				TAGE CONFIG			*		*		-		*	
	.5-FOOT HYPER	_		*RATIO	12	*		*		*		-		*	
	C WIND TUNNEL	-		- -		*		+		-		-		*	
7 (I E :	ST IH48)	-		-		-		*		*		*		*	

							WIND	TUNNEL	TEST /	, 	DMS DAT	 ГА	PROCES	SING							212
	*						*			*			*MODEL		*		*	COGNIZ	7 A NIT	* BASIC	
TEST	*			*	CONFIG	JRATIONS	*	TEST	-	*	TYPE (STING	*	TEST DA		*PUBLICATION	ONS
ID	*	REPORT	TITLE				*	PURPOS			TEST				* AGE		*			OR COMMENT	-
									,												
CALSPAN						ACE SHUTT														*DMS-DR-224	49
48HST						ER/EXTERN							* 5.5		*CALSI	PAN -	*C.	E. WITTL	_IFF/CAL	*JUNE, 19	979
						.01 SCAL	.* , (1-)	AERODYN	NAMIC H	 *			* 24.0	-		NCH HYPE				*	
9 6 H\$T					•			ING RATE					*		*ONIC	SHOCK T	「UN∗J.	E. VAUG	GHN	*	
IH33			r) IN TH				*HE C	DRBITER/	TANK :	*			*		*NEL		* - D	MS		*	
CR-151,	775*C	ALSPAN	HYPERSO	NI*			*NTEF	REACE AN	ND SUPP	*			*			NCH HYPE				*	
	0	SHOCK	TUNNEL	(T			*ORT	STRUCTL	JRE AND)*			*		*ONIC	SHOCK T	ΓUΝ*			*	
	* E	ST IH33	3)	*			*(2)1	THE HEAT	TING E	*			*		*NEL		*			*	
	*			*			*FFE0	CT OF A	BLUNT	*			*		*		*			*	
	*			*			*NOSE	CAP ON	I THE	*			*		*		*			*	
	*			*			*XTE	RNAL TAN	K NOS!	*			*		*		*			*	
	*			*			*SEC1	TION.		*			*		*		*			*	
	*			*			*			*			*		*		*	•		*	
ARC	- *F	ESULTS	OF CONV	EC+1	15-0.FLA	T PLATE N	1*TD	INVESTIC	GATE A	E * H	EAT-TR	ANS	*1.0	/	*ROCK!	WELL/	*M.	QUAN/RI	ī	*DMS-DR-22!	50
			TING TE					NAMIC F					*5.1	•	*ARC	-			- KMAN/ARC		975
182			ONGITUD					ES IN TE					*5.1		-				ER JR.		
0H43			ON THE R					VARIOL					*			C WIND T			-11 0111	*	
			AT PLAT					WIDTHS,					*		*NEL	0 42110	*			*	
OK ,41,			15-0. IN					AND OR					*		*		*			*	
			IN THE					TO THE							•		_			•	
			3.5 FOO				+0142	IO INC	FLOW.	Ţ			•				*			•	
	-		VIC WIND				-			<u>.</u>			-		-		-			+ +	
			TEST OH4				-			Ξ			<u>-</u>		<u> </u>		-			-	
		HAINEL (IESI UN4	<i>3)</i> ↑			*			*			<u>-</u>		*		-			-	
AEDC		ECHITC	00 TEST		*********	-0/VL70-0	* `~TO !		ir nou				***		* DOCK	wer /	* 14	QUAN/R	•	+ +DMS-DR-22!	
											EAI-IK			-	*ROCK	•					
HWTB VA353			CKWELL I		139			LAYER					*8.0 *		*AEDC				DALE/ARO	*JUNE, I	975
			NAL SPAC					ISTICS (∓					A. SARV		*	
OH9			ORBITER					ER SURFA		*			*		*0 10	NNEL (B)		B. WATSO	UN	*	
CR-141,			NF I GURAT				*AN U	DRBITER		*			*		*		*-D	M5		*	
			75-SCALE				*			*			*		*		*			*	
			29-0)			•	*			*			*		*		*			*	
			TUNNEL B				*			*			*		*		*			*	
			MINE BOU				*			*			*		*		*			*	
			ER CHARA	CI*			*			*			*		*		*			*	
	* E	RISTICS	5	*			*			*			*		*		*			*	
	*			*			*			*			*		*		*			*	

						WIND	TUNNEL TEST	/	DMS DATA	PROCE	SSING						213
	*			*		 *		*		*MODE				*	COGNIZANT	*	BASIC
TEST	*			*	CONFIGURATIONS	*	TEST	*	·TYPE OF			E *	TESTING	*	TEST DMS		JBLICATIONS
ID	. *	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANG	E *	AGENCY	*	PERSONNEL	*01	COMMENTS
EDC	- *1	HEAT TRA	ANSFER PH	A*OF	B.; 40(SEMISPA	*TO	INVESTIGATE F)L*I	HEAT-TRANS	\$*0.01	75 /	*	ROCKWELL/	*W.	H. DYE/RI	*DI	15-DR-2252
IWTB	- *	SE CHANG	GE PAINT	T*N;	BODY FLUSH; LE	*ANF	ORM AREA REDU	JC*		*8.0	-	*	AEDC -	*D.	A. SARVER	* JU	JLY, 1975
AE	-				. EDGE; TRANSIT					*8.0			HYPERSONIC WIN			. *	
H25A					N;SEMISPAN WING					*		*	D TUNNEL (B)	*-DN	AS	*	
R-141,			0 46-0) 0				RBITER CONFIC			*		*	•	*		*	
			KWELL INT				IONS TO SET T			*		*		*		*	
			VAL SPACE				PTIMUM MODELS			* -		*		*		*	
			ORBITER EDC TUNNE				FOR LATER TES XAMINING SHOO			-		7		-		*	
			SONIC WIN			-	NG LEADING E					-	•	-		*	
			L (TEST D				NTERFERENCE E			*		*	•	*		*	
		25A)	. (*		*FEC		*		*		*	•	*		*	
	*	,		*		*		*		*		*	•	*		*	
SFC	- */	N INVES	STIGATION	*77	'-O. 77-OTS	*T0	EVALUATE MID-	·S*1	FORCE	*0.00)4 /	*	ROCKWELL/	*V.	W. SPARKS	*D	IS-DR-2253
4TWT			MSFC THT		•		ELEVON FLIPE			*0.6			•	*-DN		* J	N., 1976
22	/+0	DETERM	MINE SPOIL	L*		*R D	DOR (USED AS	A *		*2.74		*	14-INCH TRISON	*		*	·
A 125			CTS ON WIL			*SP0	ILER) EFFECTS	*		* .		*	IC WIND TUNNEL	.*		*	
R-144,	333*0	LOADS	AND ELEV	0*		*0N '	WING BENDING/	′T*		*		*	t	*		*	
			MOMENTS 1	-			ION AND ELEVO			*		*		*		*	
			G 0.004-5				GE MOMENTS DU) *		*		*	· '	*		*	
			ELS (77-0			*RIN	G LAUNCH	*		*		*		*		*	
			OTS) OF T			*		*		*		*		*		*	
			LE VEHICLE			*		*		*		*	I	*		*	
	*:	CONFIC	GURATION	*		*		*		*		*		*		*	
RC		EDMINAL	ADEA EN	- V=	HICLE 5 ORBITER	*****	DETAIN DESCE		ODCE	*0.03	0 /	*	ROCKWELL/	*D.	J.HAWTHORNE/	# DT+D1	IC-DD-2254
1TWT			AGEMENT RI				ISTRIBUTIONS.						**		AWINORNE/		DLUME O1
73			ESTIGAT I				ICLE FORCES A		KESSOKE	*1.4			11-FOOT TRANSO			-	JLY. 1976
A148	-		IZING AN				DMENTS. ELEVO			*			NIC WIND TUNNE		•		,
A148P			LE MODEL				RUDDER HINGE			*	•			*-DN		*	
R-144,	319+	(47-0)	OF THE SPA	A *		*MOM	ENTS, BODY FL	. *		*		*		*		*	
	(E SHUTT	TLE VEHIC	L			AND ELEVON LO			*		*		*		*	
	* {	ORBITE	R CONFIG	U*		*DS	IN THE TERMIN	IA *		*		*		*		*	
			140A/B/C/I			*L A	REA ENERGY MA	N*		*		*		*		*	
			MES RESE				MENT (TAEM) A			*		*		*		*	
			TER 11 X				PPROACH OF FL	. I *		*		*		*		*	
			TRANSONI			*GHT		*		*		*		*		*	
			NEL (OA1	*		*		*		*		*		*		*	
		18)		*		*		*		*		*		*		*	
	*			平		平		*		=		*		*		*	

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					WIND	TUNNEL TE	ST /	DMS DATA	PROCES	SING					214
	*		*		*		*		*MODEL		*	*	COGNIZANT	* BAS	IC
TEST	*		*	CONFIGURATIONS	*	TĖST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLIC	ATIONS
ID	* REP	ORT TITLE	*	TESTED	* 	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
ARC	- *TERMI	NAL AREA E	NE * V	EHICLE 5 ORBITER	R*TO C	BTAIN PRE	SSUR*F	ORCE	*0.030	, /	*ROCKWELL/	*P	.J.HAWTHORNE/	RI*DMS-DR	-2254
11TWT		ANAGEMENT				STRIBUTIO			*0.6	-	*ARC -	*		*VOLUME	02
073	/*GIME	INVESTIGAT	10*		*VEHI	CLE FORCE	S AN*		*1.4		*11-FOOT TRAN	150*5	.L.TREON/	∗JULY,	1976
OA148	*NS U1	ILIZING AN	0*		*D MC	MENTS, EL	EVON*		*				. B. MEINDERS		
OA148P	*.030-	SCALE MODE	L *		*AND	RUDDER HII	NGE *		*		*L (UNITARY)	*-	DMS	*	
CR-144,	620+(47-0) OF THE S	PA*		*MOME	NTS, BODY	FL *		*		*	*		*	
	CE SH	UTTLE VEHI	CL		*AP A	ND ELEVEN	LOA*		*		*	*		*	
	E ORE	ITER CONFI	GU		*DS I	N THE TER	*ANIM		*		*	*		*	
	RATIO	N 140A/B/C	/R		*L AF	REA ENERGY	MAN*		*		*	*		*	
	*IN Th	E AMES RES	E. *		*AGEN	MENT (TAEM) AN*		*		*	*		*	
	*ARCH	CENTER 11	X *		*D AF	PROACH OF	FLI*		*		*	*		*	
		OT TRANSON			*GHT		*		*		*	*		*	
	*WIND	TUNNEL (OA	1 *		*		*		*		*	*		*	
	*48)		*		*		*		*		*	*		*	
	*		*		*		*		* .		*	*		*	
ARC				EHICLE 5 ORBITER					*0.030		*ROCKWELL/	*P	.J.HAWTHORNE/		
11TWT		ANAGEMENT				STRIBUTIO	-	RESSURE			*ARC -	*		*VOLUME	
073		INVESTIGAT				CLE FORCE	-		*1.4				.L.TREON/		1976
OA 148		ILIZING AN				DMENTS, EL			*				. B. MEINDERS	*	
OA148P		SCALE MODE				RUDDER HI			*		*L (UNITARY)	*-	DMS	*	
CR-144,) OF THE S				NTS, BODY			*		*	. *		*	
		UTTLE VEHI				ND ELEVON			*		*	*		*	
		ITER CONFI				N THE TER	-		*		*	*		*	
		N 140A/B/C	•			REA ENERGY			*		*	*		*	
		E AMES RES				MENT (TAEM			*		*	*		*	
		CENTER 11				PROACH OF	FLI*		*		*	*		*	
		OT TRANSON			*GHT		*		*		*	*		*	
		TUNNEL (DA	1 *		*		*		*		*	*		*	
	*48)		*		*		*		*		*	*		*	

					WIN	TUNNEL	TEST /	,	DMS DATA	PROCES	SSING	3				21
	*		*		*			*		*MODE!	 L	*		*	COGNIZANT	* BASIC
TEST ID		T TITLE	*	CONFIGURATIONS TESTED	*	TEST PURPOS		*	TYPE OF TEST	* *MACH	SCAL RANG		TESTING AGENCY	*	TEST DMS PERSONNEL	*PUBLICATION *OR COMMENTS
RC	- *TFRMINA	L ARFA FN	IF+V	EHICLE 5 ORBITER	2*TO	ORTAIN P	RESSUR	?∗F	DRCE	*0.036	o /	′ *R	OCKWELL/	*P.	J. HAWTHORNE/	RI*DMS-DR-2254
1TWT	- *RGY MAN			LITTLE & GROTTE		DISTRIBUT				*0.6			RC -	*	J	*VOLUME 04
73	/*GIME IN	VESTIGATI	0*			HICLE FOR	-			*1.4		* 1	1-FOOT TRANSO	*S.	L.TREON/	*AUGUST, 197
A 148	*NS UTIL	IZING AN	0*		*D 1	MOMENTS,	ELEVON	! *		*		*N	IC WIND TUNNE	*W.	B. MEINDERS	*
A148P	*.030-SC	ALE MODEL	. *		*AN	RUDDER	HINGE	*		*		* L	(UNITARY)	*-D	MS	*
R-144,	622*(47-0)	OF THE SP	A *		*M01	MENTS, BO	DY FL	*		*		*		*		*
	CE SHUT	TLE VEHIC	L		*AP	AND ELEV	ON LOA	*		*		*		*		*
	*E ORBIT	ER CONFIG	₩		*DS	IN THE T	ERMINA	*		*		*		*		*
	RATION	140A/B/C/	'R		*L /	AREA ENER	GY MAN	1*		*		*		*		*
	*IN THE	AMES RESE	*		*AGI	EMENT (TA	EM) AN	! *		*		*		*		*
		NTER 11 X				APPROACH	OF FLI	*		*		*		*		*
		TRANSONI			*GH	Γ		*		*		*		*		*
		NNEL (OA1	*		*			*		*		*		*		*
	*48)		*		*			*		*		*		*		*
	*		*		*			* _		*	. ,	, *_		*_		*
RC				EHICLE 5 ORBITER						*0.030	- ,		OCKWELL/		J.HAWIHORNE/	RI +DMS-DR-2254
1TWT	- *RGY MAN					DISTRIBUT			RESSURE	*0.6	-		RC -	* -	TDEON/	*VOLUME 05
73	/*GIME IN	_				HICLE FOR				*1.4			1-FOOT TRANSO			*AUGUST, 197
A 148		IZING AN				MOMENTS,				*			IC WIND TUNNE		-	*
A148P	4 7 7	ALE MODEL				RUDDER I				-		∓ L	(UNITARY)	*-DI	MO	*
K=144,	623*(47-0) (*CF SHIT	TLE VEHIC				MENTS, BO AND ELEV				*		≠		*		*
		ER CONFIG				IN THE T				*		*		*		*
		140A/B/C/	_		_	AREA ENER				*		*		*		*
		AMES RESE				EMENT (TA	_			*				*		*
	_	NTER 11 X				APPROACH				*		*		*		*
		TRANSONI			*GH		J. 1 L.I	*		*		*		*		*
		NNEL (OA1			*	•		*		*		*		*		*
	*48)	(041	*		*			*		*		*		*		*
	,		·							_						

ARC - *TE 11TWT - *RC 073 /*GI 0A148 *NS 0A148P *.C CR-144,624*(4 *CE *E *E *R	** REPORT TITLE ** ERMINAL AREA ENE*V BY MANAGEMENT RE* (ME INVESTIGATIO* OUTILIZING AN O* O3O-SCALE MODEL * T-O) OF THE SPA* E SHUTTLE VEHICL* ORBITER CONFIGU* ATION 140A/B/C/R* N THE AMES RESE **	'EHICLE 5 ORBITER	* PURPOSE **TO OBTAIN PRESSU **E DISTRIBUTIONS, *VEHICLE FORCES A *D MOMENTS, ELEVO *AND RUDDER HINGE *MOMENTS, BODY FL *AP AND ELEVON LO	*PRESSURE N* N* * *	*MACH RANG!	*ROCKWELL/ *ARC - *11-FOOT TRANSO	*W. B. MEINDERS	*PUBLICATIONS *OR COMMENTS RI*DMS-DR-2254 *VOLUME 06 *AUGUST, 1976
11TWT - *RC 073 /*G] 0A148 *NS 0A148P *.C CR-144,624*(4 *CE *E *RA *IN	ATTION 140A/B/C/R*		*E DISTRIBUTIONS, *VEHICLE FORCES A *D MOMENTS, ELEVO *AND RUDDER HINGE *MOMENTS, BODY FL *AP AND ELEVON LO	*PRESSURE N* N* * *	*0.6 - *1.4	*ARC - *11-FOOT TRANSC *NIC WIND TUNNE	*)*S.L.TREON/ E*W. B. MEINDERS	*VOLUME 06
11TWT - *RC 073 /*G] 0A148 *NS 0A148P *.C CR-144,624*(4 *CF *E *R/ *IN	ATTION 140A/B/C/R*		*E DISTRIBUTIONS, *VEHICLE FORCES A *D MOMENTS, ELEVO *AND RUDDER HINGE *MOMENTS, BODY FL *AP AND ELEVON LO	*PRESSURE N* N* * *	*0.6 - *1.4	*ARC - *11-FOOT TRANSC *NIC WIND TUNNE	*)*S.L.TREON/ E*W. B. MEINDERS	*VOLUME 06
74G] 0A148 *NS 0A148P *.C CR-144,624*(4 *CF *E *R *IN *AF	IME INVESTIGATIO* OUTILIZING AN O* DOSO-SCALE MODEL * 47-0) OF THE SPA* SHUTTLE VEHICL* ORBITER CONFIGU* ATION 140A/B/C/R*		*VEHICLE FORCES A *D MOMENTS, ELEVO *AND RUDDER HINGE *MOMENTS, BODY FL *AP AND ELEVON LO	N* N* * *	*1.4	*NIC WIND TUNNE	*W. B. MEINDERS	*AUGUST, 1976 *
JA148 *NS JA148P *.C CR-144,624*(*CI *E *R *IN *AF	S UTILIZING AN O* D30-SCALE MODEL * 47-0) OF THE SPA* E SHUTTLE VEHICL* ORBITER CONFIGU* ATION 140A/B/C/R*		*AND RUDDER HINGE *MOMENTS, BODY FL *AP AND ELEVON LO	*	* * *			*
CR-144,624*(4 *CE *E +R/ *IN *AF	47-0) OF THE SPA* E SHUTTLE VEHICL* ORBITER CONFIGU* ATION 140A/B/C/R*		*MOMENTS, BODY FL *AP AND ELEVON LO	*	*	*L (UNITARY)	* DMC	
*CE *E *R/ *IN *AF	SHUTTLE VEHICL* ORBITER CONFIGU* ATION 140A/B/C/R*		*AP AND ELEVON LO		*		*-DM2	*
*E *R/ *I^ *AF	ORBITER CONFIGU* ATION 140A/B/C/R*					*	*	*
*R/ *IM *AF	ATION 140A/B/C/R*		.DO THE THE TERMEN	A *	*	*	*	*
* I			*DS IN THE TERMIN		*	*	*	*
*AF	I THE AMEC DECE +		*L AREA ENERGY MA		*	*	*	*
			*AGEMENT (TAEM) A		*	*	*	*
	RCH CENTER 11 X *		*D APPROACH OF FL	I *	*	*	*	*
	FOOT TRANSONIC*		*GHT	*	*	*	*	*
	IND TUNNEL (OA1 *		*	*	*	*	*	*
*48	3) *		*	*	*	*	*	*
*	*		*	*	*	*	*	*
	RMINAL AREA ENE*V					*ROCKWELL/	*P.J.HAWTHORNE/	
	SY MANAGEMENT RE*		*E DISTRIBUTIONS,		*0.6 -	*ARC -	* . D#C TDEON/	*VOLUME O7
	ME INVESTIGATIO*		*VEHICLE FORCES A		*1.4	*11-FOOT TRANSO	•	*AUGUST, 1976
	S UTILIZING AN O*		*D MOMENTS, ELEVO		*	*NIC WIND TUNNI	E*W. B. MEINDERS	# #
	030-SCALE MODEL *		*AND RUDDER HINGE		*	*L (UNITARY)	*-DM2	*
	47-0) OF THE SPA*		*MOMENTS, BODY FL *AP AND ELEVON LO		-	*	*	•
	SHUTTLE VEHICL* ORBITER CONFIGU*		*DS IN THE TERMIN			* *	*	
	ATION 140A/B/C/R*		*L AREA ENERGY MA		·*	*	*	*
	N THE AMES RESE *		*AGEMENT (TAEM) A		*	*	*	*
	RCH CENTER 11 X *		*D APPROACH OF FL		*	*	*	*
	1 FOOT TRANSONIC*		*GHT	*	*	*	*	*
	IND TUNNEL (OA1 *		*	*	*	*	*	*
*41			*	*	*	*	*	*
*	*		*	*	*	*	*	*

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			21
*		*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST *	REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST		E* TESTING E* AGENCY	* TEST DMS * PERSONNEL	*PUBLICATION *OR COMMENTS
ARC - *1	TERMINAL AREA ENI	E*VEHICLE 5 ORBITE	R*TO OBTAIN PRESSI	UR*FORCF	*0.030 /	*ROCKWELL/	*P.J.HAWTHORNE/	RI*DMS-DR-2254
	RGY MANAGEMENT RI		*E DISTRIBUTIONS		*0.6 -	*ARC -	* .	+VOLUME O8
D73 /*C	GIME INVESTIGATIO	D*	*VEHICLE FORCES		*1.4	*11-FOOT TRANS	O*S.L.TREON/	*AUGUST, 197
	NS UTILIZING AN (*D MOMENTS, ELEVE	ON*	*		NE*W. B. MEINDERS	*
	030-SCALE MODEL		*AND RUDDER HING	-	*	*L (UNITARY)	*-DMS	*
	(47-0) OF THE SP		*MOMENTS, BODY FI		*	*	*	*
	CE SHUTTLE VEHIC		*AP AND ELEVON LO		*	*	*	*
	ORBITER CONFIG		*DS IN THE TERMI		*	*	*	*
	RATION 140A/B/C/		*L AREA ENERGY MA		*	*	*	*
	IN THE AMES RESE		*AGEMENT (TAEM)		*	*	*	*
	ARCH CENTER 11 X		*D APPROACH OF FI	LI*	*	*	*	*
	II FOOT TRANSONIO	_	*GHT	*	*	*	*	*
	VIND TUNNEL (OA1	*	*	*	*	*	*	*
*4	18)	*	*	*	*		∓	*
* ARC - *1	COMINAL ADEA CAL	*	* D+TO OGTAIN DDECC	*	*/	**	*D LUANTHODNE/	TT-DHC DD OOE4
	ERMINAL AREA ENI	E*VEHICLE 5 ORBITE	*E DISTRIBUTIONS		*0.030 /	*ROCKWELL/	*P.J.HAWTHORNE/	
	GIME INVESTIGATIO		*VEHICLE FORCES		+0.6 - +1.4	*ARC - *11-FOOT TRANS	* . TO+C TOFON/	*VOLUME 09
	IS UTILIZING AN (*D MOMENTS. ELEV		* 1 . * 4		NE*W. B. MEINDERS	*SEPT., 197
	030-SCALE MODEL	=	*AND RUDDER HING!		*	*L (UNITARY)	*-DMS	
	47-0) OF THE SPA		*MOMENTS, BODY FI		*	* (ONTIAKI)	* DM3	*
	E SHUTTLE VEHICL		*AP AND ELEVON LO		*	*	*	*
	ORBITER CONFIG		*DS IN THE TERMIN		*	*	*	*
	RATION 140A/B/C/F		*L AREA ENERGY MA		*	*	*	*
	N THE AMES RESE		*AGEMENT (TAEM)		*	*	*	*
	RCH CENTER 11 X		*D APPROACH OF FU		*	*	*	*
	1 FOOT TRANSONIC		*GHT	*	*	*	*	*
*W	IND TUNNEL (011	*	*	*	*	*	*	*
*4	18)	*	*	*	*	*	*	*

					WIND T	UNNEL TEST	/	DMS DATA	PROCES	SSING						218
TEST	*		* *	CONFIGURATIONS	*	TEST	*	TYPE OF	*MODEI	L SCALE	* * TESTIN		* *	COGNIZANT TEST DMS	* BASI	
ID	* REPORT	TITLE	* - -	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENC	/ 	* 	PERSONNEL	*OR COM	MENTS
RC	- *TEDMINAL	ADEA ENI	F * \/ F	EHICLE 5 ORBITER	• TO OF	TAIN DDESS	1 ID * I	FODCE	*0.03	0 /	*ROCKWEL!	,	∗P.I	.HAWTHORNE/	DI*UMS-UB-	- 2254
1TWT	- *RGY MANAG			LINIOLL 5 ORDITCH		TRIBUTIONS			*0.6		*ARC	•	* .		*VOLUME	
73	/*GIME INVE					LE FORCES		RESSORE	*1.4		*11-F00T			TREON/	*SEPT.,	
1148	*NS UTILIZ					ENTS, ELEV			*					B. MEINDERS	*	
1148P	*.030-SCAL					UDDER HING			*		*L (UNITA		* - DM		*	
	628*(47-0) OF					ITS. BODY F			*		*	,	*	-	*	
	*CE SHUTTL					ID ELEVON L			*		*		*		*	
	*E ORBITER					THE TERMI			*		*		*		*	
	*RATION 14					A ENERGY M			*		*		*		*	
	*IN THE AM	- ,				NT (TAEM)			*		*		*		*	
	*ARCH CENT					ROACH OF F			*		*		*		*	
	11 FOOT T	RANSONI	C		*GHT		*		*		*		*		*	
	*WIND TUNN	EL (OA1	*		*		*		*		*		*		*	
	*48)	•	*		*		*		*		*		* .		*	
	*		*		*		*		*		*		*		*	
SC.	- *TERMINAL	AREA EN	E * VI	EHICLE 5 ORBITER	R*TO 0E	TAIN PRESS	UR*	FORCE .	*0.03	0 /	*ROCKWELI	L/	*P.J	.HAWTHORNE/	RI*DMS-DR	-2254
TWT	- *RGY MANAG	EMENT R	E*		*E DIS	TRIBUTIONS	*	PRESSURE	*0.6	-	*ARC	_	* .	·	*VOLUME	11
13	/*GIME INVE	STIGATI) *		*VEHIC	LE FORCES	ÁN*		*1.4		*11-F00T	TRANSO	*S.L	.TREON/	*SEPT.,	197
148	*NS UTILIZ					MENTS. ELEV			*		*NIC WIN	D TUNNE	∗W.	B. MEINDERS	*	
148P	*.030-SCAL	E MODEL	*			RUDDER HING			*		*L (UNIT	ARY)	*-DM	S	*	
₹-147,6	01*(47-0) OF	THE SP	A *		*MOMEN	NTS, BODY F	L *		*		*	•	*		*	
	CE SHUTTL	E VEHIC	L	-	*AP AN	ND ELEVON L	*AO.		*		*		*		*	
	E ORBITER	CONFIG	U		*DS I	THE TERMI	NA*		*		*		*		*	
	RATION 14	CA/B/C/	R		*L AR	A ENERGY M	IAN*		*		*		*		*	
	*IN THE AM				*AGEMI	NT (TAEM)	AN*		*		*		*		*	
	*ARCH CENT	ER 11 X	*		*D API	ROACH OF F	LI*		*		*		*		*	
	11 F00T T	RANSONI	C		*GHT		*		*		*		*		*	
	*WIND TUNN	IEL (OA1	*		*		*		*		*		*		*	
	*48)		*		*		*		*		*		*		*	
	*		*		*		*		*		*		*		*	

				,				•
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			219
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCAL *MACH RANG		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
	ATERMANAL AREA ENE	**************************************	ALTO ORTAIN PRESCUI	D. FODOF	+0.000	/ *P00//WELL /	an CHAUTHORNE /	D1+D4C DD 0054
	*TERMINAL AREA ENE				*0.030 /	/ *ROCKWELL/	*P.J.HAWTHORNE/	
	*RGY MANAGEMENT RE		*E DISTRIBUTIONS,		*0.6 -	*ARC -	* . D+C TDEON/	*VOLUME 12
.8 ∕	*GIME INVESTIGATIO		*VEHICLE FORCES AN		*1.4	*11-FOOT TRANS		*SEPT., 1976
_	*NS UTILIZING AN O		*D MOMENTS, ELEVOI		-		E*W. B. MEINDERS	* *
8P	*.030-SCALE MODEL		*AND RUDDER HINGE		- -	*L (UNITARY)	+-DMS	-
47,002	*(47-0) OF THE SPA		*MOMENTS, BODY FL		- -	- -	-	*
	*CE SHUTTLE VEHICL		*AP AND ELEVON LOA *DS IN THE TERMINA		-	÷	Ţ	∓
	*E ORBITER CONFIGU		*L AREA ENERGY MAI			*	- -	
	*RATION 140A/B/C/R *IN THE AMES RESE		*AGEMENT (TAEM) A			~	-	*
	*ARCH CENTER 11 X		*D APPROACH OF FL		-		Ĩ	
	*11 FOOT TRANSONIC		*GHT	*	*	*	*	*
	*WIND TUNNEL (OA1		*	*	*	*	*	*
	*48)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
_	*TERMINAL AREA ENE	*VEHICLE 5 ORBITES	*TO ORTAIN PRESSU	R*FORCE	*0.030 /	/ *ROCKWELL/	*P.J.HAWTHORNE/	RI*DMS-DR-2254
	*RGY MANAGEMENT RE		*E DISTRIBUTIONS.		*0.6 -	*ARC -	* .	*VOLUME 13
	*GIME INVESTIGATIO		*VEHICLE FORCES AN		*1.4	*11-FOOT TRANS		*SEPT., 1976
в ′	*NS UTILIZING AN O		*D MOMENTS. ELEVO		*		E+W. B. MEINDERS	*
- 8P	*.030-SCALE MODEL		*AND RUDDER HINGE		*	*L (UNITARY)	*-DMS	*
47.603	3*(47-0) OF THE SPA		*MOMENTS, BODY FL		*	*	*	*
	*CE SHUTTLE VEHICL		*AP AND ELEVON LO		*	*	*	*
	*E ORBITER CONFIGU		*DS IN THE TERMINA		*	*	*	*
	*RATION 140A/B/C/R	*	*L AREA ENERGY MAR		*	*	*	*
	*IN THE AMES RESE		*AGEMENT (TAEM) AT		*	*	*	*
	*ARCH CENTER 11 X	*	*D APPROACH OF FL		*	*	*	*
	*11 FOOT TRANSONIC		*GHT	*	*	*	*	*
	*WIND TUNNEL (OA1	*	*	*	*	*	*	*
	*48)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
-	*SHADOWGRAPHS OF A	*SERIES-BURN, PARA	*TO IDENTIFY AND I	L*FORCE	*4.0 /	/ *ARC /	*J. B. DODS, JR.,	R*DMS-DR-2255
	*IR FLOW OVER PROS	*LLEL-BURN; 2 CANO	*OCATE REGIONS OF	*	*0.8 ~	*ARC -	*. D. HANLY, J.	H.*JULY, 1975
Г -	*PECTIVE SPACE SHU	*PY CONFIGURATIONS	*SIGNIFICANT TURBU	J*	*1.4	*11-FOOT TRANS	D*EFTING/ARC	*
	*TTLE CONFIGURATIO	*:	*LENCE	*	*	*NIC WIND TUNN	E*D.W.HERSEY	*
144	*NS AT MACH NUMBER		*	*	*	*L (UNITARY)	*M. M. MOSER JR.	*
	*S FROM 0.8 TO 1.4	*	*	*	*	*9-FOOT BY 7-FO	D*-DMS	*
	*	*	*	*	*	*OT SUPERSONIC	*	*
	*	*	*	*	*	*WIND TUNNEL (J*	*
	*	*	*	*	*	*NITARY)	*	*
	*	*	*	*	*	*	*	*

				WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING					220
	*	*		*		*		*MODEL		*	*	COGNIZANT	* BASIC	
TEST			CONFIGURATIONS	*	TEST		TYPE OF			* TESTING	*	TEST DMS	*PUBLICATI	
ID	* REPORT T	ITLE *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMEN	NTS
. –						-								
LARC			TER MOLD LINE			_	ORCE			*LARC /		SPENCER, JR.,		
8TPT	- *REDUCTION		EL 72-OTS		ARIOUS CONF	_		* 0.35				M. WARE/LARC	*SEPT., 1	1977
714	/*IGATION ON				OMPONENTS O			* 1.20		*8-FOOT TRANS			*	
LA69	*10-SCALE N				L DRAG OF V			*		*IC PRESSURE	ט-+טו	IMS	*	
CR-151,	369*THE SPACE				PRIMARY AT			*		*NNEL	*		*	
	*VEHICLE (7				N ON DRAG R			*		*	*		*	
	*LAUNCH CON				ON FOR ET A TO ORB. AN			-		*	-		*	
	*TION TESTE *E LARC 8-F			*MUD:				-		<u>.</u>			*	
	*NSONIC PRE			+UM3	PUD3	-				*	*		*	
	*UNNEL FOR			*		*		*		*	*		*	
	*H RANGE OF			*		*		*		*	*		*	
	*0 1.20	*		*		*		*		*	*		*	
	*	*		*		*		*		*	*		*	
ARC	- *INVESTIGAT	TONS ON+88	-OTS MODIFIED 1	W∗TO [FTERMINE WI	NG*F	RESSURE	*0.020	o /	*ROCKWELL/	*R.	H. LINDAHL	*DMS-DR-22	258
11TWT			MS PODS AND COL					*0.90		*ARC -	*-D		*VOLUME O	
072			AIR MPS AND SRI			_		*1.40		*11-FOOT TRAI	NSO*	· · · ·	*APRIL.	197
IA72			UME SIMULATION					*		*NIC WIND TU			*	
CR-151.0	045 * WELL INTER				ON HINGE MO			*		*L (UNITARY)	*		*	
•	*L INTEGRAT				NOZZLE GIM			*		*	. *		*	
	*CONFIGURAT				MENTS, AND			*		*	*		*	
	C (MODIFIE	D) IN T		*RFAC	CE PRESSURE	PR*		*		*	*		*	
	HE 11-F001	TRANSO		*OFII	ES ON THE O	RB*		*		*	*		*	
	*NIC WIND 1	UNNEL *		*ITE	R, ET, SRB;	TO *		*		*	*		*	
	*	*		*DETI	ERMINE ET BA	S *		*		*	*		*	
	*	*		*E C	DOLING RATES	*		*		*	*		*	
	*	*		*		*		*		*	*		*	
ARC			3-OTS MODIFIED							*ROCKWELL./		H. LINDAHL	*DMS-DR-2	
1 I TWT			MS PODS AND CO					*0.90		*ARC -	_	DMS	*VOLUME O	
072			AIR MPS AND SR					*1.40		*11-FOOT TRA			*APRIL,	197
IA72			UME SIMULATION					*		*NIC WIND TU			*	
CR-151,	046 WELL INTER				ON HINGE MO			*		*L (UNITARY)	*		*	
	*L INTEGRAT				, NOZZLE GIM			*		*	*		*	
	*CONFIGURAT				DMENTS, AND			*		*	*		*	
	*C (MODIFII	•			CE PRESSURE			*		*	*		∓	
	*HE 11-F001				LES ON THE C			* *		T	*		+	
	*NIC WIND	OMNEL *			R, ET, SRB;			*		-	-		- -	
	*	*			ERMINE ET BA DOLING RATES	-		.		+	÷		*	
	*	*		7E CI	JULING KAIES	٠. •		•		. ■	*		*	
	-	*		~		-		4		T	-			

				•	WIND .	TU-INEL TEST	/	DMS DATA	PROCES	SING				221
	*		*		*		*		*MODEL		*	*	COGNIZANT	* BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
ARC				8-OTS MODIFIED W				RESSURE		•	*ROCKWELL/		H. LINDAHL	*DMS-DR-2258
11TWT				OMS PODS AND COL					*0.90		*ARC -	* - D!	4S	*VOLUME 03
072				AIR MPS AND SRE			-		*1.40		*11-FOOT TRANS			*APRIL, 1977
IA72				LUME SIMULATION					*		*NIC WIND TUNN	E*		*
CR-151,		ELL INTERNATION				ON HINGE MON	-		*		*L (UNITARY)	*		*
		. INTEGRATED SS				NOZZLE GIME			*		*	*		*
		CONFIGURATION 14				MENTS, AND			*		*	*		*
		(MODIFIED) IN				PRESSURE F			*		*	*		*
		E 11-FOOT TRANS				ES ON THE OF			*		*	*		*
	*1	NIC WIND TUNNEL	*			, ET, SRB; 1			*		*	*		* .
	*		*			RMINE ET BAS			*		*	*		*
	*		*		*E CUI	DLING RATES.	. *		*		*	*		*
400	*		*		*		*	DECOURE	*	,	*	*		*
ARC				B-OTS MODIFIED W				RESSURE		•	*ROCKWELL/		H. LINDAHL	*DMS-DR-2258
11TWT	_		•	DMS PODS AND COL					*0.90	-	*ARC -	*-DI	45	*VOLUME 04
072				AIR MPS AND SRE					*1.40		*11-FOOT TRANS	-		*APRIL, 1977
IA72				LUME SIMULATION					*		*NIC WIND TUNN	E*		*
CK-151,		IELL INTERNATION			_	ON HINGE MON			*		*L (UNITARY)	*		
		. INTEGRATED SS			-	NOZZLE GIME			*		*	*		
		CONFIGURATION 14				MENTS, AND			*		*	*		*
		(MODIFIED) IN				PRESSURE F			*		*	*		*
		IE 11-FOOT TRANS				ES ON THE OF			*		*	*		
	*1	IIC WIND TUNNEL				, ET, SRB; 1			*		*	*		.
			*			RMINE ET BAS	_		*		*	*		*
	-		*		*E CO	DLING RATES.	. *		*		*	*		*
ARC	_ +1	NIVESTICATIONS (B-OTS MODIFIED W	* I+TO DI	TCDMING WIN	* D	DESCUDE	*0.020) /	* *ROCKWELL/	*0	H. LINDAHL	* *DMS-DR-2258
11TWT				DMS PODS AND COL				KESSUKE	*0.020		*ARC -	*-D!		*VOLUME 05
072				AIR MPS AND SRE					*1.40		*11-FOOT TRANS		13	*APRIL. 1977
1A72				LUME SIMULATION					* 1.40		*NIC WIND TUNN			*
		ELL INTERNATION				ON HINGE MON			*		*L (UNITARY)	*		*
0.1 .0.,		INTEGRATED SS				NOZZLE GIME					**	*		•
		ONFIGURATION 14			-	MENTS, AND S			*		*	*		*
		(MODIFIED) IN				PRESSURE P			*		*	*		*
		E 11-FOOT TRANS				S ON THE OF			*		*	*		*
		IC WIND TUNNEL	-			ET. SRB: 1			*		*	*		*
	*		*			RMINE ET BAS			*		*	*		*
	*		*			LING RATES.			*		*	*		*
	*		*		*	-LING NATES	*		*		*	*		*

					WIND T	UNNEL TEST	/ [DMS DATA	PROCES	SING					222
	*		*		*		*		*MODEL		*	*		COGNIZANT	* BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF			*	TESTING *		EST DMS	*PUBLICATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST				AGENCY *		PERSONNEL	*OR COMMENTS

c	- *I	NVESTIGATIONS O	N*88	3-OTS MODIFIED W	*TO D	TERMINE WI	VG*PI	RESSURE	*0.020) /	*R00	CKWELL/ *	R. H	. LINDAHL	*DMS-DR-2258
TWT	- *A	0.020-SCALE JE	*/0	MS PODS AND COL	+AND V	ERTICAL TA	[*		*0.90	- '	*AR	C - +	-DMS		*VOLUME 06
2	/*T	PLUME MODEL (8	8*D	AIR MPS AND SRE	*L R00	T BENDING	40*		*1.40		*11	-FOOT TRANSO*			*APRIL, 1977
72	-			UME SIMULATION	-				*		*NI	C WIND TUNNE*			*
-151.		ELL INTERNATION				N HINGE MO			*			(UNITARY) *	:		*
,		INTEGRATED SSV			_	NOZZLE GIM			*		*	*	ı		*
	_	ONFIGURATION 14				MENTS, AND			*		*	*			*
		(MODIFIED) IN				PRESSURE			*		*	*	:		*
		E 11-FOOT TRANS				S ON THE O			*		*	*			*
		IC WIND TUNNEL				ET, SRB:			*		*	· ·			*
	*		*			RMINE ET BA			*		*	·	t		*
	*		*			LING RATES			*		*	•			*
	*		*		*	SETING MAIES	. ·		*		*	· ·			*
С	- *TI	MVESTICATIONS O	NI± Q E	3-OTS MODIFIED W		TEDMINE WI	NG * DI	DESCUDE	*0.020	. /	* DO	CKWELL/ *	D H	. LINDAHL	*DMS-DR-2258
TWT				DMS PODS AND COL				KESSUKE	*0.90		*AR		-DMS		*VOLUME 07
2				AIR MPS AND SRE					*1.40			-FOOT TRANSO*			*APRIL, 1977
72	-			LUME SIMULATION	_				-1.40			C WIND TUNNE			*APRIL, 19//
. —		•		TOME SIMULATION		•			# 						Ī.
- 151,		ELL INTERNATION				ON HINGE MO					* L	(UNITARY)			Ī.
		INTEGRATED SSV				NOZZLE GIM			*		*				
		DNFIGURATION 14				MENTS, AND			*		*		•		#
		(MODIFIED) IN				PRESSURE			*		*				*
		E 11-FOOT TRANS				ES ON THE O			*		*				*
	*N	IC WIND TUNNEL	*			, ET, SRB;			*		*	•			∓
	*		*			RMINE ET BA			*		*	*			*
	*		*			DLING RATES	. *		*		*	*	k .		*
_	*		*		*		*		*	. ,	*	*********	* 		*
C				B-OTS MODIFIED V				RESSURE	*0.02			•		. LINDAHL	*DMS-DR-2258
TWT			•	DMS PODS AND COL		•			*0.90		*AR	-	·-DMS	i	*VOLUME O8
2				AIR MPS AND SRE					*1.40			-FOOT TRANSO			*APRIL, 1977
72				LUME SIMULATION					*		–	C WIND TUNNE	k		*
-151,		ELL INTERNATION				ON HINGE MO			*		*L	(UNITARY) *	t		*
		INTEGRATED SSV				NOZZLE GIM			*		*	*	k		*
		ONFIGURATION 14				MENTS, AND			*		*	*	k		*
		(MODIFIED) IN			*RFAC	E PRESSJRE	PR*		*		*	*	k		*
		E 11-FOOT TRANS				ES ON THE O			*		*	*	ĸ		*
	*N	IC WIND TUNNEL	*		*ITER	, ET, SRB;	TO*		*		*	*	×		*
	*		*		*DETE	RMINE ET BA	S *		*		*	×	k		*
	. *		*		*E CO	DLING RATES	. *		*		*	*	k		*
			*		*										*

)								,
							WIND	TUNNEL 1	rEST /	DMS DAT	A PROCES	SSING						223
	*			*			*		 *	. 	*MODEL		*			COGNIZANT	* 1	BASIC
TEST ID	*	REPORT	TITLE.	*	CONFIGUR TEST		*	TEST PURPOSE	*	TYPE O	F *	SCALE RANGE		*	Т	EST DMS PERSONNEL	*PUB	LICATIONS COMMENTS
^		NUTCTIO	ATTONC O	N+06			TO D	F T F D14 T 1 1	· UTNO	DDECCURE	. 0. 004	,	· DOOMUELL /			LTMDALII	, DMC	DD 0050
RC TWT					B-OTS MOD DMS PODS						*0.020 *0.90		*ROCKWELL/ *ARC -		·DMS	. LINDAHL		-DR-2258 JME 09
2	_			•	AIR MPS						*1.40		*11-FOOT T		DMS			IL, 1977
72					LUME SIMU						*		*NIC WIND				*	,
-151,0			ERNATION					ON HINGE			*		*L (UNITAR				*	
			ATED SSV					NOZZLE			*		*	*			*	
		_	ATION 14					MENTS, A			*		*	*			*	
			IED) IN					E PRESSI			*		*	*			*	
			OT TRANS TUNNEL					ES ON TH			*		*	*			*	
	*	10 #110	TOMMEL	*				RMINE ET	•		*		*	*			*	
	*			*				OLING RA			*		*	*			*	
	*			*			*		*		*		*	*			*	
RC	- *			*TA	ASK CANCE	LED, I	4		*	FORCE	*		*LARC /	*1	J. E	. VAUGHN	*DMS	-DR-2259
7	- *			* A Y	/ 1977		*		*		*		*LARC -	*-	DMS		*TASI	<
4 .	/*			*			*		*		*		*8-FOOT TRA	-				CELLED
60A	*			*			*		*		*		*IC PRESSU	E TU*			*MAY	, 1977
	*			*			*		*		*		*NNEL	*			*	
•	- +D	ECHI TC	OE TECTO	*00	RBITER VEI	JICLE .	* 4*ODTA	TN: (4)0/	* *	EODOE	* *0.36		* *ROCKWELL/	*		MAKI/ARC	**	-DR-2261
C SWT					MITHOUT								*ARC -			DZIUBALA.		
2			76-0) OF			141500		SIM. TPS			*0.256		*40-F00T B				K.÷VUL\ 'JUL*	
100			E SHUTTL		=			ONIC VEH			*		*FOOT SUBS				*	., .502
-167,3			ORBITER					3)ELEVON			*		*WIND TUNNS			. EDWARDS	*	
	* I	N THE N.	ASA/AMES	*			*DER/	SPDBRK,	AND B*		. *		*	*-	DMS		*	
			CENTER				*ODYF	LAP EFFE	CT. W*		*		*	*			*	
	_		FOOT SUB	-				VEH. 101	_		*		*	*			*	
			D TUNNEL	*				GAPS;(4)			*	;	*	*			*	
	Ŧ (·	DA 100)		<i>∓</i>				PDBRK AN			*		* *	*			*	
	*			*				P HINGE SEALS:(*		*	*			*	
	*			*				TEST AND			*		*	*			*	
	*			*				DATA PRO			*		*	*			*	
	*			*				(6)EVAL			*	:	*	*			*	
	*			*				FFECTS.	*		*		*	*			*	
	*			*			*		*		*	:	*	*			*	

						WIND	TUNNEL TEST	/ [OMS DATA	PROCES	 SING							224
																 -		
TCCT	*			*	CONFICURATIONS	*	*FC*	*	TVDE 05	*MODEL		*	TECT7110	*	COGNIZANT		* BASI	
TEST ID	*	DEDODI	TITLE	*	CONFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF TEST	* *MACH	SCALE			*	TEST DMS PERSONNEL		*PUBLICAT *OR COMMI	
		REFURI		- - -	163160				1691	*MACH	KANGE		AGENCT		PERSUNNEL		-UK CUMMI	
ARC					RBITER VEHICLE					*0.36	•				L. MAKI/ARC		*DMS-DR-	
40SWT					1 WITHOUT TAILCO				RESSURE	*0.112					J. DZIUBALA,			
462	•		(76-0) OF		ΙE		H SIM.TPS;(2)			*0.256			O-FOOT BY 80-			1	*JULY,	1982
DA 100			CE SHUTTL				SONIC VEH.5 A			*			OOT SUBSONIC			,	*	
CK-16/,			ORBITER				(3)ELEVON, RU			*		* W			R. EDWARDS		*	
			VASA/AMES				SPDBRK, AND			*		*		*-D	M2	,		
			H CENTER				FLAP EFFECT.			*		*		*			*	
			-FOOT SUB	-			VEH. 101 SEAL			* -		*		*			*	
			ND TUNNEL	*			GAPS;(4)RUDE			* *		-		-			+ +	
	-	(DA 100)					SPDBRK AND BO			*		±		Ţ.			*	
	-			Ť			AP HINGE MOM. H SEALS:(5)FL			-		-		-			+	
				Ţ			TEST AND SIG					<u>.</u>		<u>.</u>			-	
	*			Ţ			DATA PROBE					*		Ţ			*	
	*			*			B:(6)EVALUATE			*		*		*			*	
	*			*			EFFECTS.			*		*		*			*	
	*			*		*	LITEOIS.	*		*		*		*			*	
TBCA	- *1	RESULTS	OF A CAR	R*C	ARRIER W/ ORB.	A * T D	ORTAIN FORCE	Δ * F	DRCE	*0.03	1	*5	ROCKWELL/	*.1	R. CORNELIU	S.	*DMS-DR-	2262
BTWT					ONE. CARRIER AL	_			01102	*0.3			BCA -		R. WOLFLA/T	-		
1472					E. MATED 747/ORE					*0.7			TRANSONIC WIND				*NOV	1976
CA6			ING 8 X 1		•		AND SEPARATE			*			TUNNEL		E. VAUGHN		*	
CR-147.			TRANSONIC				O INVESTIGATE			*		*		*-D			*	
,			USING A O				ECTS OF ORBIT			*		*		*			*	
	(03-SCALE	E 747 CAM	/			NCIDENCE. TA			*		*		*			*	
	(DRBITER	MODEL 45	-			E. STRUT FAIR			*		*		*			*	
	*(o .		*			S. ELEVON. AN			*		*		*			*	
	*			*			Y FLAP SETTIN			*		*		*			*	
	*			*		*GS		*		*		*		*			*	
	*			*		*		*		*		*		*			*	
TBCA	- *	RESULTS	OF A CAR	R * C	CARRIER W/ ORB.	OT*A	OBTAIN FORCE	A*F	ORCE	*0.03		* [ROCKWELL/	* ئ.	R. CORNELIU	S,	*DMS-DR-	2262
BTWT	- *	IER AIR	CRAFT VER	I * L	ONE, CARRIER AL	GN*C	MOMENT DATA (*NC		*0.3	-	*1	TBCA -	*A.	R. WOLFLA/T	вс	*VOLUME	02
1472	/*	FICATION	N TEST IN	*1	NE, MATED 747/OR	B*EAC	H VEHICLE, MA	* 1		*0.7		*1	TRANSONIC WIND	٧Đ.	A. SARVER		*NOV.,	1976
CA6	*	THE BOE	ING 8 X 1	*]	TER	*TED	AND SEPARATI	D *		*		*1	TUNNEL		E. VAUGHN		*	
CR-147.	631+	2 FOOT	TRANSONIC	*		*; T	O INVESTIGATI	*		*		*		* - C	MS		*	
			USING A O	· .	•	*EFF	ECTS OF ORBIT	ΓE*		*		*		*			*	
		-	E 747 CAM	•		*R I	NCIDENCE, TA	[L*		*		*		*			*	
			MODEL 45	-*			E, STRUT FAIR			*		*		*			*	
	*1	0		*			S, ELEVON, A			*		*		*			*	
	*			*			Y FLAP SETTI	1 *		*		*		*			*	
	*			*		*GS		*		*		*		*			*	
	*			*		*		*		*		*		*			*	

					WIND T	UNNEL TE	ST /	DM:	S DATA	PROCES	SSING						225
	*		*		*			*		*MODEL	 L	*		*	COGNIZANT	* [BASIC
TEST	*		* CONF	IGURATIONS	*	TEST	1	* T	YPE OF			* TEST	ING	*	TEST DMS		ICATIONS
ID	*	REPORT TITLE				PURPOSE			TEST		RANGE	* AGEN	CY	*	PERSONNEL	*OR (COMMENTS
							- 										
AEDC		ESULTS OF HEAT															
HWTB		ANSFER TESTS ON								*8.0		*AEDC			DYE/RI	*MAR	CH, 1976
B8A	•	0.0175-SCALE S				RATES ON		*							KNOX/AEDC	*	
0H74		CE SHUTTLE ORBI			*. FUS	ELAGE SI	DE	*		*		*D TUNN	EL (B)		H. LINDAHL	*	
CR-144,		R MODEL (56-0)			*			*		*		*		*-D	MS	*	
		THE AEDC VKF '			*			*		*		*		*		*	
		HYPERSONIC WIN	D*		*			*		*		*		*		*	
	. *T	UNNEL (OH74)	*		*			*		*		*		*		*	
	*		*		*			*		*		*		* .		*	
LARC		RANSONIC STABIL							CE	*0.35		*LARC			GAMBLE, M. B		
8TPT		Y AND CONTROL C				AERODYN				*1.20		*LARC			JR./JSC; B.		, 1975
717		RACTERISTICS OF				TO SUBST				*					CER, G. WARE/	LA*	
LA62		O.015-SCALE (RI				THE DEST				*			SSURE TU			*	
CR-141,		OTELY CONTROLLE				N THE CL				*		*NNEL			PARRELL/RI	*	
		LEVON) MODEL 49				ITER CON	IF I GU	*		*		*		-	W. BALL	*	
		O OF THE SPACE			*RATIO	N		*		*		*			M. MANN	*	
		UTTLE ORBITER T	_		*		;	*		*		*		*-DI	MS	*	
		TED IN THE NASA,			*		:	*		*		*		*		*	
		ARC 8-FOOT TPT	(*		*		:	*		*		*		*		*	
•	. *L	A62)	*		*			*		*		*		*		*	
	*		*		*			*		*	. ,	*		*		*	DD 000E
ARC		ESULTS OF TESTS					-		CE	* .030		*ROCKWE	LL/		J. MARROQUIN		
12PT		SING A 0.030-SC								*0.26		*ARC	-	*I	D MATCON	*JAN.	., 1976
078	•	E MODEL (45-0)	_	-		ON ORBIT				*0.26					B. WATSON	*	
OA159		THE SPACE SHUT								*		*RE TUN	NEL	*-DI	M5	*	
CR-141,	_	E VEHICLE ORBITI								*		*		*		*	
		IN THE NASA/AR								*		*		*		*	
		2-FOOT PRESSURE								*		*		*		*	
	*1	UNNEL (OA159)		ROUND PLANE		FURCE D	ATA.	* ·		*		*		*		*	
	*			4 ORBITER			•	*		*		*		*		*	
	*			SIMULATED BA			,	∓		∓		∓		*		*	
	*			SUPPORTS US			•	.		∓		*		*		*	
				AMES 40X80	-		•	-		*		∓ 		≠		*	
	*		*		平			₹		*		*		*		*	

226				SING	PROCES	DMS DATA	T /	TUNNEL TEST	WIND						
* BASIC *PUBLICATIONS *OR COMMENTS	TEST DMS	* * *	TESTING AGENCY	SCALE*		TYPE OF TEST		TEST PURPOSE	* * *	CONFIGURATIONS TESTED	*	LE	PORT TIT		ST D
*DMS-DR-2266	WARE, B. SPENC	*G.	ARC /	j / *	*0.015	ORCE	DET*E	SENERATE A 1	***TD (OA/B/C=B26 C9 E	1 * 1 4	PERSO	SDNIC-SU	*TR41	_
*JULY, 1976			TV -		*0.6	UNUE				F8 M16 N28 R5					
*					*4.6			A BASE WHICH					ER STABI	-	
*	E. VAUGHN		TUNNEL		*			BE USED TO					CONTROL		
*		*-D1		*	*			ANTIATE THE					RISTICS		4.60
*	··· -	*		*	*			YNAMIC DATA					5-SCALE		.,
*		*		*	*			N DATA BOOK				•	CONTROL		
*		*		*	*			HE CURRENT C					N) MODEL		
*		*		*	*		*	R DESIGN.			*	SHU	HE SPACE	*0F	
*		*		*	*		*		*		*	TEST	ORBITER	*TTL	
*		*		*	*		*		*		*	D HIG	N THE VS	*ED	
*		*		*	*		*		*		1*	TUNN	EED WIND	*H S	
*		*		*	*		*		*		*			*EL	
*		*		*	*		*		*		*			*	
*DMS-DR-2267	B. KANIPE/JSC	*D.6	isc /	00 / *	*0.010	ORCE	EL R*F	STUDY TUNNER	*T0 1	ACTION CONTROL	1*RE	EST M	LTS OF T	*RES	-
*VOLUME O1	. W. BALL	*ປ.	.ARC -	- *	*10.3		ND *	ATABILITY AN	*EPE/	STEM	.*SY	IASA/L	IN THE N	*A22	-
*JUNE, 1976	. W. KLUG	S-FLO*G.	CONTINUOUS-	*	*10:3		INT*	ECT ON JET :	*EFF		*	CFHT	31-INCH	/*ARC	
*	DMS	VIC T*-DI	/ HYPERSONI	*	*		, TO*	CTION DATA,	*ERA		*	SCALE	N 0.010-	*ON	
*		*	JNNEL	*	*		CTS*	ERMINE EFFE	*DET		Γ*	OF T	L (32-0)	+MOD	7,60
*		*		*	*		ING *	MODEL HEATI	*0F		*	TTLE	PACE SHU	*HE	
*	•	*		*	*		/FLA*	LEVON, BODYI	*, E		Γ*	N 3 T	IGURATIO	*CON	
*		*		*	*		ON *	EFLECTIONS (*P D		*	RCS	TERMINE	*0 D	
*		*		*	*		3N, *	INTERACTION	*JET		1*	LD IN	FLOW FIE	*JET	
*		*		*	*		E JE*	DY MULTIPLE	*STU		*	ID TO	CTION AN	*TER	
*		*		*	* -		CTS,*	IRING EFFEC	*T F		*		STIGATE		
*		*		*	*			ESTIGATE ARI			*	;TS	AS EFFEC	*AL	
*		*	ļ	*	*			IO EFFECTS,			*			*	
*		*		*	*		*OITI	SUPER POSI			*			*	
*		*		*	*		*	FFECTS	*N E		*			*	
*		*		*	*		*		*		*			*	

	.*))	.:							
					WIND	TUNNEL TES	г/	DMS DATA	PROCES	SING						227
	*	·	*		*				*MODEL		*		*	COGNIZANT	* BAS	IC
TEST ID	* * 	REPORT TITLE	*	CONFIGURATIONS TESTED	*	TEST PURPOSE	* *	TYPE OF TEST		SCALE RANGE		TING NCY	*	TEST DMS PERSONNEL	*PUBLIC *OR COM	ATIONS
RC HT 8 22 -147,6	- * /* * 505* * * *	RESULTS OF TEST A22 IN THE NASA/ ARC 31-INCH CFHT ON AN O.010-SCAL MODEL (32-0) OF HE SPACE SHUTTLE CONFIGURATION 3 O DETERMINE RCS JET FLOW FIELD 1 TERACTION AND TO INVESTIGATE RT R AL GAS EFFECTS	'L*S E** T ** N *		*EPEA *EFFE *ERAC *DETE *OF M *, EL *P DE *JET *STUD *T FI *INVE *RATI *UDY	TUDY TUNNEL TABILITY AL CT ON JET TION DATA, RMINE EFFEC EVON, BODYL FLECTIONS (INTERACTION Y MULTIPLE RING EFFEC STIGATE AR SUPER POSIT	ND * INT* TO* CTS* NG * FLA* ON * UE* IS.* EA * ST*	ORCE	*0.010' *10.3 *10.3 * * * * * * * * * * * * * * * *	•	*LARC *CONTI	ERSONIC	*J. LO*G.	3. KANIPE/JSC W. BALL W. KLUG MS	*DMS-DR *VOLUME *JUNE, * * * * * * * *	
RC HT 8 22 -147,6	- * /* * * * * * * *	RESULTS OF TEST A22 IN THE NASA/ ARC 31-INCH CFHT ON AN O.010-SCAL MODEL (32-0) OF HE SPACE SHUTTLE CONFIGURATION 3 O DETERMINE RCS JET FLOW FIELD I TERACTION AND TO INVESTIGATE RT R AL GAS EFFECTS	L*S E* T* T* N*		*EPEA *EFFE *ERAC *DETE *OF M *, EL *P DE *JET *STUD *T FI *INVE *RATI	TABILITY AN CT ON JET : TION DATA, RMINE EFFEC ODEL HEATIN EVON, BODYN FLECTIONS (INTERACTION Y MULTIPLE RING EFFEC STIGATE ARI O EFFECTS, SUPER POSIT	ND * INT* TO* CTS* NG * FLA* DN * JE* IS.* EA * ST*	ORCE	* *0.010(*10.3 *10.3 * * * * * * * * * * * * * * * * * * *	<u>.</u>		ERSONIC	*J. LO*G.	B. KANIPE/JSC W. BALL W. KLUG MS	* *DMS-DR *VOLUME *JUNE, * * * * * * * * * * *	

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	WIND TUNNEL TEST / DMS DATA	PROCESSING	228
* CONFIGURATIONS ID * REPORT TITLE * TESTED	* * TEST * TYPE OF * PURPOSE * TEST	*MODEL * .* COGNIZANT * SCALE* TESTING * TEST DMS *MACH RANGE* AGENCY * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
118	*TO STUDY TUNNEL R*FORCE *EPEATABILITY AND * *EFFECT ON JET INT* *ERACTION DATA, TO* *DETERMINE EFFECTS* *OF MODEL HEATING * *, ELEVON, BODYFLA* *P DEFLECTIONS ON * *JET INTERACTION, * *STUDY MULTIPLE JE* *T FIRING EFFECTS, * *INVESTIGATE AREA * *RATIO EFFECTS, ST* *UDY SUPER POSITIO* *N EFFECTS *	*0.0100 / *MSC / *D.B. KANIPE/JSC *10.3 - *LARC - *J. W. BALL *10.3 *CONTINUOUS-FLO*G. W. KLUG * *W HYPERSONIC T*-DMS * *UNNEL * * * * * * * * * * * * * * *	*DMS-DR-2267 *VOLUME O4 *JUNE, 1976 * * * * * * * * * * * * * * * *
TBCA - *RESULTS OF AN INV*BOEING AX1319P-1 BTWT - *ESTIGATION OF AER*CARRIER 1477 /*ODYNAMIC FORCES, *ORBITER 47-0 CA9 *MOMENTS, AND PRES* CA9P *SURES ON 0.03-SCA* CR-151,396*LE MODELS OF THE *	*CE AND MOMENT DAT*PRESSURE	* * * * * * * * * * * * * * * * * * *	I. *VOLUME O1

							WIND	TUNNEL TE	ST /	DMS DATA	PROCE	SSING					229
TEST ID	*	REPORT	TITLE	*	CONFIGURA TESTE		*	TEST PURPOSE	*	TYPE OF TEST		SCALE		* * *	COGNIZANT TEST DMS PERSONNEL		SIC CATIONS MMENTS
BCA	- *	RESULTS	OF AN	NV*B	OEING AX13	19P-1	*SIX-	-COMPONENT	FOR*	FORCE	* 0.0	3 .	*ROCKWELL/	*W.	R. COVINGTON	/BO*DMS-D	R-2268
TWT		ESTIGATI						ND MOMENT			*0.03	•	*TBCA -		NG, H.SEXTON	-	
477	/*	DDYNAMIC	FORCES	, +0	RBITER 47-	כ	*A WE	RE MEASUR	ED 0*		*0.4	- ,	*TRANSONIC	WIND*S.	LUTFI,S.L. O	LM*JUNE,	1979
A9	*1	MOMENTS.	AND PR	ES*			*N Th	HE TOTAL V	/EHIC*		*0.70	,	*TUNNEL		N/RI	*	
19P		SURES ON						AND ON THE			*	,	+		H. LINDAHL	*	
t-151,3		LE MODEL						R TAILCONE			*	,	*	*-D	MS	*	
		MATED SP						-COMPONENT			*	,	*	*		*	
		LE ORBIT		-				AND MOMENT			*	*	*	*		*	
		RRIER AI		• • • •				ERE MEASUR			*	,	*	*		*	
	(DDEL NUM	BERS A)	13			*N Th	HE CARRIER	RIG*		*	2	*	*		*	
	*	19P-1 AN	ID 47-0)	I *		· · · .	*HT]	TIP FIN. C	RBIT*		*	•	*	*		*	
	*	N THE BO	EING TR	AN*			*ER E	ELEVON HIN	IGE M*		*	3	*	*		*	
	*	SONIC WI	ND TUNN	EL*			*OMEN	NTS WERE A	L\$0 *		*		*	*		*	
	*	(CA9)		*			*MEAS	SURED.	*		*	,	*	*		*	
	*			*			*		*		*	,	*	*		*	
CA	- *	RESULTS	DF AN I	NV*B	DEING AX13	19P-1	*SIX-	-COMPONENT	FOR*	FORCE	* 0.0	3,	*ROCKWELL/	*W.	R. COVINGTON,	/BO+DMS-D	R-2268
WT	- *	ESTIGATI	ON OF A	ER*C	ARRIER		*CE /	AND MOMENT	DAT+	PRESSURE	*0.03	/ ,	*TBCA -	*EI	NG, H.SEXTON	H. *VOLUM	E 03
77	/*(DOYNAMIC	FORCES	. *0	RBITER 47-0)	*A WE	RE MEASUR	ED 0*		*0.4	- ,	*TRANSONIC	WIND*S.	LUTFI,S.L. OI	LM*JUNE,	1979
9	*1	MOMENTS,	AND PR	ES*			*N Th	HE TOTAL V	EHIC*		*0.70	,	*TUNNEL	*AN	N/RI	*	
9P	*	SURES ON	0.03-5	CA*			*LE A	AND ON THE	ORB*		*		*	*R.	H. LINDAHL	*	
2-151,3	98+	LE MODEL	S OF TH	E *			*ITEF	R TAILCONE	. TH*		*	*	*	*-D	MS	*	
	*1	MATED SP	ACE SHU	*11			*REE	-COMPONENT	FOR*		*	,	*	*		*	
	*	LE ORBIT	ER AND	CA*			*CE A	ND MOMENT	DAT*		*	*	*	*		*	
	*	RRIER AI	RCRAFT	(M*			*A WE	RE MEASUR	ED 0*		*	,	*	*		*	
	(DDEL NUM	BERS AX	13			*N TH	HE CARRIER	RIG*		*	*	*	*		*	
	*	19P-1. AN	D 47-0)	I *			*HT 1	TIP FIN. O	RBIT*		*	*	*	*		*	
	[N THE BO	EING TR	AN			*ER E	LEVON HIN	IGE M*		*		*	*		*	
	*	SONIC WI	ND TUNN	EL*			*OMEN	ITS WERE A	LS0 *		*	*	*	*		*	
	*	(CA9)		*				SURED.	*		*		*	*		*	
	*			•			*		*		*		*	*		*	

TECT	*			*	00115701154775115	*	7567	*	TVDE 05					COGNIZAN		
TEST ID			T171 F		CONFIGURATIONS		TEST		TYPE OF			TESTING AGENCY	*	TEST DMS		
10	т к 		TITLE		TESTED	* 	PURPOSE	-	TEST	*MACH	RANGE	AGENCY		PERSONNEL	- +UR CU	
											_					
					EING AX1319P-1							ROCKWELL/			ON/BO+DMS-DI	
									PRESSURE			*TBCA -			ON,H. +VOLUM	
					BITER 47-0					*0.4					OLLM*JUNE,	1979
A9		,	AND PRE				TOTAL V			*0.70		TUNNEL		N/RI	*	
A9P			0.03-SC				ID ON THE			*	*	ķ		H. LINDAHI	- *	
R-151,39							TAILCONE			*	*	k	* - D	MS	*	
			CE SHUT	•			OMPONENT			*	*	*	*		*	
			R AND C				D MOMENT			*	*	*	*		*	
	RRI	ER AIR	CRAFT (М		*A WER	E MEASUR	ED 0*		*	*	k	*		*	
	*ODE	L NUMB	ERS AX1	3∗		*N THE	CARRIER	RIG*		*		*	*		*	
	*19P	-1 AND	47-0)	I *		*HT TI	P FIN. O	RBIT*		*	2	k	*		*	
	N T	HE BOE	ING TRA	N		*ER EL	EVON HIN	GE M*		*	1	k	*		*	
	+SON	IIC WIN	ID TUNNE	L*		*OMENT	'S WERE A	LSO *		*	,	*	*		* .	
	*(CA	9)		*		*MEASL	IRED.	*		*	7	k	*		*	
	*			*		*		*		*	3	k	*		*	
BCA -	*RES	ULTS 0	F AN IN	V*B0	EING AX1319P-1	*SIX-C	OMPONENT	FOR*I	FORCE	* 0.0	3,	*ROCKWELL/	*W.	R. COVINGTO	ON/BO*DMS-D	R-2268
TWT -	*EST	IGATIO	N OF AE	R*CA	RRIER	*CE AN	D MOMENT	DAT *	PRESSURE	*0.03	/ ,	*TBCA -	*EI	NG, H.SEXTO	ON,H.∗VOLUM	E 05
477	/ * ODY	NAMIC	FORCES,	*0R	BITER 47-0	*A WER	RE MEASUR	ED 0*		*0.4	- ,	*TRANSONIC	WIND*S.	LUTFI,S.L.	OLLM*JUNE,	1979
:A9	*MOM	ENTS,	AND PRE	S*		*N THE	TOTAL V	EHIC*		*0.70		*TUNNEL	*AN	IN/RI	*	
A9P	*SUR	ES ON	0.03-SC	A *		*LE AN	ID ON THE	ORB*		*	1	*	*R.	H. LINDAH	∟ *	
R-151,40	O*LE	MODELS	OF THE	*		*ITER	TAILCONE	. TH*		*	,	*	*-D	MS	*	
	MAT	ED SPA	CE SHUT	T		*REE-C	OMPONENT	FOR*		*	1	*	*		*	
	*LE	ORBITE	R AND C	A *		*CE AN	D MOMENT	DAT*		*	1	*	*		*	
	RRI	ER AIR	CRAFT (M		*A WER	RE MEASUR	ED 0*		*		*	*		*	
			ERS AX1				CARRIER			*	1	*	*		*	
	* 19P	-1 AND	47-0)	I *			P FIN. O			*	:	*	*		*	
			ING TRA	-			EVON HIN			*	:	*	*		*	
			D TUNNE				S WERE A			*		*	*		*	
	*(CA		,	*		*MEASL	-	*		*		*	*		*	
	*	- ,						*		*	:				*	

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								-
				*				
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			231
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCALE *MACH RANGE		* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
SPAN -	· *TPANSONIC HIGH B	RE*140A/B/C=B26 C9	F*TO ORTAIN RASIC	S*FODCF	*0.015 /	*LARC /	*H. PARRELL/RI	*DMS-DR-2269
		A*43 F8 M16 N28 R5				*CALSPAN -	*J. D. GAMBLE/JSC	
	/*BILITY AND CONTR		*THROUGH A FULL R				N*R. H. LINDAHL	*
70	*L CHARACTERISTIC	S*	*NGE OF ELEVON AN			*IC WIND TUNNE		*
147,62	24*0F A 0.015-SCALE	*	*AILERON DEFLECTI	0*	*	*	* .	*
	REMOTELY CONTROL	.L.	*NS, VERIFICATION	*	*	*	*	*
	ED ELEVON MODEL	(*OF DATA OBTAINED	*	*	*	*	*
	*44-0) OF THE SPA		*AT OTHER FACILIT		*	*	*	*
	*E SHUTTLE ORBITE		*ES, AND EFFECTS		*	*	* .	*
	*TESTED IN THE CA		*F REYNOLDS NUMBE	:R*	*	*	*	*
	*LSPAN 8-FOOT TWT	「 *	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
		T*ORBITER W/ INDEP				*LARC /	*J. D. GAMBLE/JSC	
		R*NDENTLY-OPERATED				*LARC -	*	*DEC., 1975
18	· ·	C*LEFT,RIGHT ELEVO				*UNITARY PLAN \	W *	*
3A	*S OF A 0.015-SCA		*E CURRENT ORBITE	.R*	*	*IND TUNNEL	*	*
144,57	9*E REMOTELY CONTR		*CONFIGURATION	*	*	*	*	*
	*LLED ELEVON MODE		*	*	*	*	*	*
	*(49-0) OF THE SP		* .	*	*	*	*	*
	*ACE SHUTTLE ORBI *ER (LA63A)	. I *	*	*	*	*	*	*
	*ER (LAGSA)	.	Ţ	-	* *	*	-	*
.c -	*SUPERSONIC START	L*MODEL 69-0 WITH	E*TO DETERMINE SUR	E * E O D C E	*0.015 /	*LARC /	*W. P. PHILLIPS/L	**************************************
		C*OREBODY RSI MODS				*LARC -	*RC	*FEB 1977
	/*HARACTERISTICS C		*CS EFFECTS OF RS			*UNITARY PLAN \		*
	/*A 0.015 SCALE MO		*REDUCTION ON FOR			*IND TUNNEL	*D.B. WATSON	*
1A/B	*DEL 69-0 OF THE		*EBODY	*	*	*	*-DMS	*
	4*PACE SHUTTLE ORB		*	*	*	*	*	*
,	*TER WITH FOREBOD		*	*	*	*	*	*
	*RSI MODIFICATION		*	*	*	*	*	*
	*S IN THE NASA/LA		*	*	*	*	*	*
	*C 4-FOOT UPWT (L		*	*	*	*	*	*
	*GS 1 AN) 2)	*	*	*	*	*	* -	*
	· · · · · · · · · · · · · · · · · · ·							

			WIND TUNNE	TEST / DMS DA	TA PROCESS	ING		232
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGURATION	DNS * TE	ST * TYPE	OF * S	CALE* TESTING	TEST DMS	
ID	* REPORT TITLE	E * TESTED	* PURP	DSE * TEST	*MACH RA	ANGE* AGENCY	PERSONNEL	*OR COMMENTS
AEDC	- *RESULTS OF AN	INV*SSV 3	*TO INVEST	IGATE AE*FORCE	*0.010	/ *ROCKWELL/	*E. CHEE, J. D/	AILE*DMS-DR-2272
HWTB	- *ESTIGATION OF		*RODYNAMIC	INTERAC*	*5.93 -	*AEDC -	*DA/JSC	*VOLUME O1
C4A	/*ERNAL TANK SEE		*TIONS BET	WEEN ET *	*	*HYPERSONIC	WIN*J. E. VAUGHN	*JUNE, 1977
IA114	*TION EFFECTS U		*AND ORBIT		*	*D TUNNEL (B) *M. M. MOSER JE	₹. *
CR-151.	077*G AN 0.010-SC	ALE *	*G RTLS ABI	DRT SEPA*	*	*	*-DMS	*
	MODEL (52-OT)	SPA	*RATION	*	*	*	*	*
	*CE SHUTTLE VE		*	*	*	*	*	*
	E IN THE ARNOI	LD E	*	*	*	*	*	*
	NGINEERING DE	VELO	*	*	*	*	*	*
	*PMENT CENTER '	VON *	*	*	*	*	* *	*
	KARMAN FACILI	TY T	*	*	*	*	*	*
	*UNNEL B	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
AEDC	- *RESULTS OF AN	INV*SSV 3	*TO INVEST	IGATE AE*FORCE	*0.010	/ *ROCKWELL/	∗E. CHEE, J. Da	AILE*DMS-DR-2272
HWTB	- *ESTIGATION OF	EXT*	*RODYNAMIC	INTERAC*	*5.93 -	*AEDC -	*DA/JSC	*VOLUME O2
C4A	/*ERNAL TANK SE	PARA*	*TIONS BET	WEEN ET *	*	*HYPERSONIC	WIN*J. E. VAUGHN	*JUNE, 1977
IA114	*TION EFFECTS	USIN*	*AND ORBIT	ER DURIN*	*	*D TUNNEL (B	i) ∗M. M. MOSER J	R. *
CR-151,	078*G AN 0.010-SC	ALE *	*G RTLS AB	ORT SEPA*	*	*	*-DMS	*
	MODEL (52-OT)	SPA	*RATION	*	*	*	*	*
	CE SHUTTLE VE	HICL	*	*	*	*	*	*
	E IN THE ARNO	LD E	*	*	*	*	*	*
	NGINEERING DE	VELO	*	*	*	*	*	*
	*PMENT CENTER	VON *	*	*	*	*	*	*
	KARMAN FACILI	TY T	*	*	*	*	*	*
	*UNNEL B	*	*	*	*	*	*	*
	*	•	*	*	*	*	*	*

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DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	E *48-0 (02, 04, 0 /7*S1, ATY, ATX) HT* I * S* CT* ZI* M* 31* V *	* PURPOSE	* TYPE OF * TEST * TEST E PR*FORCE IS O*PRESSURE E ON* SEP * NCES* ED * O RA* 5 FE*	*MODEL * SCA *MACH RAN *0.0125 *0.3 *0.7 * *	ALE* TESTING NGE* AGENCY / *ROCKWELL/ *LTV	* CDGNIZANT * TEST DMS * PERSONNEL *R.L. GILLINS, *SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG *-DMS * * * * * * * * * * * * *	* BASIC *PUBLICATIONS *OR COMMENTS V.E*DMS-DR-2273 *VOLUME O1 GAS *MAY, 1976 * * * * * * * * * * * * * * * * * * *
ESULTS OF AN A DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	* TESTED	NS * TEST * PURPOSE /1.*TO PRESENT THE *OXIMITY EFFECT D6.*F EACH VEHICLE *THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	* TYPE OF * TEST * TEST E PR*FORCE IS O*PRESSURE E ON* SEP * NCES* ED * O RA* 5 FE*	* SCA *MACH RAN: *0.0125 *0.3 - *0.7	ALE* TESTING AGE* AGENCY / *ROCKWELL/ *LTV *HIGH SPEED	* TEST DMS * PERSONNEL *R.L. GILLINS, *SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG	* BASIC *PUBLICATIONS *OR COMMENTS V.E*DMS-DR-2273 *VOLUME 01
ESULTS OF AN A DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	* TESTED	* PURPOSE /1,*TO PRESENT THE *OXIMITY EFFECT DG,*F EACH VEHICLE *THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	* TEST E PR*FORCE IS O*PRESSURE E ON* SEP * NCES* ED *) RA* 5 FE*	* SCA *MACH RAN *0.0125 *0.3 - *0.7	WGE* AGENCY **ROCKWELL/ *LTV *HIGH SPEED	* TEST DMS * PERSONNEL *R.L. GILLINS, *SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG	*PUBLICATIONS *OR COMMENTS
ESULTS OF AN A DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	* TESTED	* PURPOSE /1,*TO PRESENT THE *OXIMITY EFFECT DG,*F EACH VEHICLE *THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	* TEST E PR*FORCE IS O*PRESSURE E ON* SEP * NCES* ED *) RA* 5 FE*	*MACH RANGE *0.0125 *0.3 *0.7	WGE* AGENCY **ROCKWELL/ *LTV *HIGH SPEED	* PERSONNEL *R.L. GILLINS. *SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG	*OR COMMENTS V.E*DMS-DR-2273 *VOLUME O1
DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	IG*747/4 E *48-O (02, 04, 0 /7*S1, ATY, ATX) HT* I * S* CT* ZI* M* 31* V *	*OXIMITY EFFECT D6,*F EACH VEHICLE *THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	TS O*PRESSURE TON* TON* TON* TON* TON TON TON TON TON TON TON TON TON TON	*0.3 ~ *0.7	*LTV - *HIGH SPEED	*SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG	*VOLUME 01
DYNAMIC INVEST TION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	IG*747/4 E *48-O (02, 04, 0 /7*S1, ATY, ATX) HT* I * S* CT* ZI* M* 31* V *	*OXIMITY EFFECT D6,*F EACH VEHICLE *THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	TS O*PRESSURE TON* TON* TON* TON* TON TON TON TON TON TON TON TON TON TON	*0.3 ~ *0.7	*LTV - *HIGH SPEED	*SPARZA/RI WIN*CARL ZIEGLER/G *DYNAMICS LAB *D. A. SARVER *G. W. KLUG	*VOLUME 01
HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G 0.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	/7*S1, ATY, ATX) HT* I * S* CT* ZI* M* 31* V *	*THE OTHER AT S *ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	SEP * NCES* ED *) RA* 5 FE*			*DYNAMICS LAB *D. A. SARVER *G. W. KLUG	GAS *MAY, 1976 * * * * * * * * * * * *
7 CARRIER FLIGEST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G 0.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	HT* I * S* CT* ZI* M* 31* V *	*ARATION DISTAN *(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	NCES* ED *) RA* 5 FE*	* * * * * * * * * * * * * * * * * * * *	*D TUNNEL * * * * * * *	*D. A. SARVER *G. W. KLUG	* * * * * * * * *
EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.O125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	I * S* CT* ZI* M* 31* V *	*(FROM THE MATE *CONFIGURATION) *NGING FROM 1.5	ED *) RA* 5 FE*	* * * * * * * * * * * * * * * * * * * *	* * * * * * *	*G. W. KLUG	* * * * * * * * *
N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	S* CT* ZI* M* 31* V *	*CONFIGURATION) *NGING FROM 1.5) RA* 5 FE*	* * * *	* * * *		* * * * * *
PARATION CHARA RISTICS UTILI G O.O125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	CT* ZI* M* 31* V *	*NGING FROM 1.5	5 FE*	* * * *	* * * *	*-DMS * * *	*
RISTICS UTILI G O.O125-SCALE DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	ZI* M* 31* V *			* * *	* * *	* * *	* * * *
G O.O125-SCALE DELS (48-O/AX1 I-1) IN THE LT X4-FOOT HIGH S	M* 31* V *	* * * *	* * *	*	*	*	*
DELS (48-0/AX1 I-1) IN THE LT X4-FOOT HIGH S	31* V *	*	*	*	*	*	*
I-1) IN THE LT X4-FOOT HIGH S	V *	*	*		•		•
X4-FOOT HIGH S				*	*	*	*
		*	*	*	*	*	*
D WIND TUNNEL		*	*	*	*	*	*
26)	*	*	*	*	*	*	*
•	*	*	*	*	*	*	*
ESULTS OF AN A	ER*AX1318I-1, 747/	/1,*TO PRESENT THE	PR*FORCE	*0.0125	/ *ROCKWELL/	*R.L. GILLINS,	V.E*DMS-DR-2273
DYNAMIC INVEST	IG*747/4	*OXIMITY EFFECT	S O*PRESSURE	*0.3 -	*LTV -	*SPARZA/RI	*VOLUME 02
TION OF A SPAC	E *48-0 (02, 04, 0	D6.*F EACH VEHICLE	ON*	*0.7	*HIGH SPEED	WIN*CARL ZIEGLER/G	GAS *JUNE, 1976
				*	*D TUNNEL	*DYNAMICS LAB	*
			-	*	*		*
				*	*		*
	_			*	*	*-DMS	*
				*	*	*	*
		*EI 10 75 FEET.	. *	*	*	*	*
		∓	*	*	* 	# _	∓
		•	∓	-	- -		*
•		*		-	*	* *	- •
		*	*	*	*	*	*
	*	*	*	*	· *	*	*
- - ,	*	*	*	*	*	*	*
	OYNAMIC INVEST FION OF A SPAC HUTTLE ORBITER 7 CARRIER FLIG EST CONFIGURAT N TO DETERMINE PARATION CHARA RISTICS UTILI G O.0125-SCALE DELS (48-0/AXI I-1) IN THE LT	OYNAMIC INVESTIG*747/4 FION OF A SPACE *48-0 (02, 04, 6) HUTTLE ORBITER/7*\$1, ATY, ATX) T CARRIER FLIGHT* EST CONFIGURATI * N TO DETERMINE S* PARATION CHARACT* RISTICS UTILIZI* G 0.0125-SCALE M* DELS (48-0/AX131* L-1) IN THE LTY * C4-FOOT HIGH SPE* D WIND TUNNEL C*	OVNAMIC INVESTIG*747/4 FION OF A SPACE *48-0 (02, 04, 06,*F EACH VEHICLE HUTTLE ORBITER/7*\$1, ATY, ATX) TO CARRIER FLIGHT* ST CONFIGURATI * N TO DETERMINE S* PARATION CHARACT* RISTICS UTILIZI* G 0.0125-SCALE M* DELS (48-0/AX131* L-1) IN THE LT'/ * WIND TUNNEL C* *OXIMITY EFFECT *ARATION CH. * **CONFIGURATION **NGING FROM 1.5 **ET TO 75 FEET. ** ** ** ** ** ** ** ** **	TION OF A SPACE *48-0 (02, 04, 06,*F EACH VEHICLE ON* HUTTLE ORBITER/7*S1, ATY, ATX) *THE OTHER AT SEP * 7 CARRIER FLIGHT* *ARATION DISTANCES* ST. CONFIGURATI * *(FROM THE MATED * N TO DETERMINE S* *CONFIGURATION) RA* PARATION CHARACT* *NGING FROM 1.5 FE* RISTICS UTILIZI* *ET TO 75 FEET. * 3 O.0125-SCALE M* * DELS (48-0/AX131* * (4-FOOT HIGH SPE* * WIND TUNNEL C* * ** ** ** ** ** ** ** ** *	## OXIMITY EFFECTS O*PRESSURE *0.3 - ## OXIMITY EFFECTS O*PRESSURE *0.7 - ## OXIMITY EFFECTS ## OXIMITY EFFEC	PYNAMIC INVESTIG*747/4	OYNAMIC INVESTIG*747/4

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING		234
	*	*	*	*	*MODEL *	* COGNIZANT	-
TEST ID	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	=	STING * TEST DMS ENCY * PERSONNEL	
LTV	- *RESULTS OF AN A	ER*AX1318I~1, 747/	,*TO PRESENT THE P	R*FORCE	*0.0125 / *ROCK	WELL/ *R.L. GILLINS,	V.E'*DMS-DR-2273
HSWT	- *ODYNAMIC INVEST	IG*747/4	*OXIMITY EFFECTS	O*PRESSURE	*0.3 - *LTV	- *SPARZA/RI	*VOLUME O3
559	/*ATION OF A SPAC	E *48-0 (02, 04, 06	.*F EACH VEHICLE C	N*	*0.7 *HIGH	SPEED WIN+CARL ZIEGLER/	GAS *JUNE, 1976
CA26	*SHUTTLE ORBITER	2/7*S1, ATY, ATX)	*THE OTHER AT SEP	*	* *D TUI	NNEL *DYNAMICS LAB	*
CR-144,	614*47 CARRIER FLIG	SHT*	*ARATION DISTANCE	:S*	* *	*D. A. SARVER	*
	*TEST CONFIGURAT	`I *	*(FROM THE MATED	*	* *	∗G. W. KLUG	*
	ON TO DETERMINE	S	*CONFIGURATION) R	?A*	* *	*-DMS	*
	EPARATION CHARA	CT	*NGING FROM 1.5 F	E*	* *	*	*
	ERISTICS UTILI	ZI	*ET TO 75 FEET.	*	* *	*	*
	NG O.O125-SCALE	. M	*	*	* *	*	*
	ODELS (48-0/AX1	131	*	*	* *	*	*
	*81-1) IN THE LT	™ *	*	*	* *	* .	*
	4X4-FOOT HIGH S	SPE	*	*	* *	*	*
	ED WIND TUNNEL	(C	*	*	* *	*	*
	*A26)	*	*	*	* *	*	*
	*	*	*	*	* *	*	*
LTV	- *RESULTS OF AN A	NER*AX1318I-1, 747/	I,*TO PRESENT THE F	R*FORCE	*0.0125 / *ROCK	WELL/ *R.L. GILLINS,	V.E*DMS-DR-2273
HSWT	- *ODYNAMIC INVEST		*OXIMITY EFFECTS		*0.3 - *LTV	- *SPARZA/RI	*VDLUME O4
559	/*ATION OF A SPAC	E *48-0 (02, 04, 0	S,*F EACH VEHICLE O	N*	*0.7 *HIGH	SPEED WIN+CARL ZIEGLER/	'GAS *JUNE, 1976
CA26	*SHUTTLE ORBITER	R/7*S1, ATY, ATX)	*THE OTHER AT SER	*	* *D TU	NNEL *DYNAMICS LAB	*
CR-144,	615*47 CARRIER FLIG	SHT*	*ARATION DISTANCE	S*	* *	*D. A. SARVER	*
	*TEST CONFIGURAT	ΓI *	*(FROM THE MATED	*	* *	∗G. W. KLUG	*
	ON TO DETERMINE	S	*CONFIGURATION) F	? A*	* *	*-DMS	*
	EPARATION CHARA	/CT	*NGING FROM 1.5 F	E*	* *	*	*
	ERISTICS UTILI	ZI	*ET TO 75 FEET.	*	* *	*	*
	NG 0.0125-SCALE	M	*	*	* *	*	*
	ODELS (48-0/AX1	131	*	*	* *	*	*
	*81-1) IN THE LT	ΓV *	*	*	* *	*	*
	4X4-FOOT HIGH S	SPE	*	*	* *	*	*
	ED WIND TUNNEL	(C	*	*	* *	*	*
	*A26)	*	*	*	* *	*	*
	*	*	*	*	* *	*	*

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				WIND T	UNNEL TES	T /	DMS DATA	PROCESSING	3					235
TEST ID	* * * REF	ORT TITLE	* * CONFIGURATION * TESTED		TEST PURPOSE	* *	TYPE OF TEST	*MODEL * SCAL *MACH RANG		TESTING AGENCY	* T	COGNIZANT EST DMS PERSONNEL	* BASIC *PUBLICAT: *OR COMME	IONS
τv	- *RESUL	TS OF AN A	MER*AX1318I-1, 74	7/1.*TO PR	ESENT THE	PR+F	FORCE	*0.0125 /	/ *R0	DCKWELL/	*R.L.	GILLINS, V.	E*DMS-DR-2	273
SWT		MIC INVEST			TY EFFECT			*0.3 -	*1.1	•		ZA/RI	*VOLUME O	
59	•		E *48-0 (02, 04,		H VEHICLE	ON*	•	*0.7	*H]	IGH SPEED WIN	I*CARL	ZIEGLER/GAS	*JUNE,	1976
A26			R/7*S1, ATY, ATX)		THER AT S			*	*Đ	TUNNEL		MICS LAB	*	
R-144,6		RRIER FLIC		·	ON DISTAN			*	*			. SARVER	*	
		CONFIGURAT		•	THE MATE			*	*			. KLUG	*	
		DETERMINE TION CHARA			GURATION) FROM 1.5			* *	*		*-DMS		# _u	
		ICS UTILI			75 FEET.			*	*		*		*	
		O125-SCALE		+C1 1U	/J FEET.	*		*	*		*		*	
		(48-0/AX1		*		*		*	*	-	*		*	
		IN THE LT		*		*		*	*		*		*	
	4X4-F	OOT HIGH S	PE	*		*		*	*		*		*	
	ED WI	ND TUNNEL	(C	*		*		*	*		*		*	
	*A26)		*	*		*		*	*		*		*	
	*		*	. *		*		*	*		*		*	
FC			N *74-OTS, VEH. 5				ORCE	*0.6 -		SFC /		. RAMSEY/MSFO		
TWT OO		NGS ON THE	ON*SCENT CONFIG.			_		*4.96				. SPARKS	*FEB.,	1976
114	•	SHUTTLE V			ON A O.OO MODEL OF	_		*		4-INCH TRISON C WIND TUNNEL			*	
		5 CONFIGUR			LE AS CEN			*	* 10	P MIND IDNNET	.+~DM3		*	
		MODEL 74-			URATION	*		*	*		*		*	
		THE MSFC		*	011212011	*		*	*		*		*	
	- ,	TRISONIC		*		*		*	*		*		*	
	*ND TU		*	*		*		*	*		*		*	
	*		*	*		*		*	*		*		*	
			XP*O.0125-SCALE S				FORCE	* 0.0125 /				SPARZA,RI,J.		
			TI*ORBITER		ND NORMAL			*.3 -	* A F			NSON,D. PENA,	*VOLUME O	1
0	-		MI+0.0125-SCALE 7				•	*.6		4-FOOT TRANSO			*MAY,	1976
123B		PARATION C			RE OBTAIN			*		IC WIND TUNNE			*	
- 144,6		RISTICS FO			IXED 747			*	*L		*-DMS		*	
		RBITER/747 A 0.0125-S			F ATTACK			*	*		¥		∓	
		A 0.0125-5 DEL (48-0			DEGREES TRYING ORB			*	*		*		*	
		-1 747) IN			LE OF ATT			*	*		*		*	
		ES RESEARC		*	LL UI AII	*		*	*		*		*	
•		R 14-FOOT		*		*		*	*		*		*	
		NNEL (CA23		*		*		*	*		*		*	
	*	•	*	*		*		*	*		*		*	

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					WIND	TUNNEL TEST	/ DMS	DATA	PROCES	SING					236
	*		*		*		*		*MODEL		*	*	COGNIZANT	* BASI	
TEST ID		ORT TITLE	* * 	CONFIGURATION TESTED	5 * 	TEST PURPOSE	* TYF TE				* TESTING * AGENCY	*	TEST DMS PERSONNEL	*PUBLICA *OR COMM	
ARC	- *RESUL	TS OF AN E	XP*0	.0125-SCALE 3S	V *LON	GITUDINAL,I.AT	E*FORCE	į.	* 0.01		*ROCKWELL/		ESPARZA,RI,J.		
14-TWT 120		NTAL INVEST		RBITER).0125-SCALE 74		AND NORMAL S	-		*.3 *.6		*ARC - *14-FOOT TRAN		WNSON,D. PENA	.,*VOLUME *MAY.	02 1976
CA23B		PARATION C				WERE OBTAINED			*		*NIC WIND TUN			*	157
R-144,	604*RACTE	RISTICS FO	R *			FIXED 747 AN			*		*L	*-DM	IS	*	
		RBITER/747				OF ATTACK OF			*		*	*		*	
		A 0.0125-S DEL (48-0				,4 DEGREES WH Varying orbit			*		*	*		*	
	_	-1 747) IN				NGLE OF ATTAC			*		*	*		*	
		ES RESEARC			*		*		*		*	*		*	
		R 14-F00T			*		*		*		*	*		*	
	ND 10	NNEL (CA23	B) *		*		*		*		*	*		*	
EDC	- *HEAT	TRANSFER A	ND + 4	O-DEG NOSE-CLE	AN*DET	ERMINE THE IN	NF*HEAT	TRAN	S*2.5	-	*MSFC /	*H.	R. CARROLL/MM	C*DMS-DR-	2276
WTA				NO PROTUBERANC					*5.5		*AEDC -		E. VAUGHN	*JUNE,	197
1A		OBTAINED O				CAP/LIGHTNIN			*		*SUPERSONIC W			*	
H13				OUBLE CONE(10- G-40-DEG)(NO PR					*		*D TUNNEL (A)	*-DN	15	*	
K-151,				BERANCES)		E TIP ON THE			*		*	*		*	
	*AT MA	CH NUMBERS	*D	OUBLE CONE WIT	H *SHU	TTLE EXTERNAL	*		*		*	*		*	
			*P	ROTUBERANCES	*TAN	κ.	*		*		*	*		*	
	*(FH13	()	*		*		*		*		*	*		*	
ISFC.	- *FORCE	TEST OF A	O*M	ODEL 461, 142-	IN*TO	OBTAIN AERODY	YN∗FORCI	Ξ	*0.88	1	*MSFC /	 ∗J.	D. JOHNSON/MS	F*DMS-DR	-2277
RWT				H DIA. WITHOUT					*0.6	-	*MSFC -	*C		*JULY,	197
34				ROTUBERANCES		A LARGE RANG			*0.7				W. WINKLER/NS	SI*	
A13F		.ID ROCKET ! (MSFC MOD			*0F *ERS	REYNOLDS NUME	3 * *		*		*NUMBER WIND *NNEL	1U*V. *-D1		*	
IK - 144,		R 461) IN			* = = = = = = = = = = = = = = = = = = =		*		*		*	*	13	*	
		SA/MSFC HI			*		*		*		*	*		*	
		LDS NUMBER	*		*		*		*		*	*		*	
	*WIND	TUNNEL	*		*		*		*		*	*		*	
	.		•		7		<u>.</u>		•		•	•	•		
							•								

		,						,							
					WIND	TUNNEL TEST	/	DMS DATA	PROCESS	ING					237
	*		*		*		*		*MODEL		*	*	COGNIZANT	* B	ASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	* S	CALE	* TESTING	*	TEST DMS	*PUBL	ICATIONS
ID	*	REPORT TITLE	* 	TESTED	*	PURPOSE	*	TEST	*MACH R	ANGE	* AGENCY	*	PERSONNEL	*OR C	OMMENTS
С	- *1	.OW-SUBSONIC STA	R*TF	ST CANCELLED	W*TFS	CANCELLED	M*I	ENDCE	* 0.01	5 /	*1 APC /	*R	SPENCER, JR./	't ∗DMS~	DP-2278
Ť		LITY AND CONTRO		•	*AY	•	*	ONGE	*0.06 -	•	*LARC -	*AR		*TASK	
•		CHARACTERISTICS			*		*		*0.30		*LOW-TURBULENCE			*CANC	
1	•	F A O.O10-SCALE			*		*		*		*PRESSURE TUNN			*MAY.	
		REMOTELY CONTROL			*		*		*		*EL	* .		*	
	* E	D ELEVON MODEL	(*		*		*		*		*	*		*	
	4	19-0) OF THE SPA	Ċ		*		*		*		*	*		*	
	* E	SHUTTLE ORBITE	R*		*		*		*		*	*		*	
	* I	N THE LANGLEY R	*		*		*		*		*	*		*	
	* E	SEARCH CENTER L	0*		*		*		*		*	*		*	
	* W	I TURBULENCE PRE	S*		*		*		*		*	*		*	
	*S	SURE TUNNEL	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
С		IIGH SUPERSONIC						FORCE	*2.86 -		*LARC /	*B.	SPENCER, JR.,	*DMS-	DR-2279
T		ABILITY AND CON							*4.60		*LARC -		WARE, R. FOUR	N*JUNE	, 1976
1		OL CHARACTERIST		W)		A BASE FOR C			*		*UNITARY PLAN		•	*	
33B		S OF A 0.015-SC				NT SS ORB. C	*NO		*		*IND TUNNEL		GAMBLE/JSC	*	
·144,6		E (REMOTELY CON			*F.		*		*		*		W. BALL	*	
		ROLLED ELEVON) M			*		*		*		*		E. VAUGHN	*	
		EL 49-0 OF THE	_		*		*		*		*	*-D	AS	*	
		ACE SHUTTLE ORB			*		*		*		*	*		* .	
		ER TESTED IN TH			*		*		*		*	*		*	
		ASA/LARC 4-FOOT	*		*		*		*		*	*		*	
	*0	IPWT(LEG 2)	*		*		*		*		*	*		*	
	*		*		*		*		*	,	*	*		*	
, 		HEAT-FLUX GAGE M					-	HEAT-TRANS			*LARC /		SPENCER, JR.,		
Т		SUPEMENTS ON A							*4.6 -		*LTV -		L. STALLINGS	/*JAN.	, 1976
	•	AT PLATE AT A M		I FLUX GAGES	_	N-FILM HEAT-			*4.6		*HIGH SPEED WII			*	
8 444 E		CH NUMBER OF 4.6				SAGES TO DEF			*		*D TUNNEL		C. POPE / LTV	*	
144,5		'N THE VSD HIGH PEED WIND TUNNEL	-			DUNDARY LAYE RACTERISTICS			*		*		W. BALL M. MOSER JR.	*	
		A FEASIBILITY T				JPERSONIC SPI			-		~ ∸	*M. *~D\		*	
		TA FEASIBILITY T	_ T		*1 50 *DS	PERSONIC SPI	* 3.3		-		*	+-01	13	*	
	*	1 (LM20)	*		**		-		-		T	<i>-</i>		. 1	
	~		~		~		7		~		*	*		*	

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						WIND 1	UNNEL TEST	/ [MS DATA	PROCES	SSING								238
	*			*		*		*		*MODEL	_	*			*	COGNIZANT	*	BAS	IC
TEST	*			* C0	NFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	E* '	TESTING	3	*	TEST DMS	*	PUBLIC	ATIONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGI	E* .	AGENCY		*	PERSONNEL	*	OR COM	MENTS
ADC		UDCONTO	CTABLLI	T # D A C F	The Thir	*DEE 14	15 MON 1 TAIS		nnar.		· · ·		20	,		u undernuoon	/ 104	DMC-DD	-2284
ARC 12PT	-		STABILI NTROL CH				NE NON-LINE		JRGE	*0.0	-	*LA	RC ,			M. UNDERWOOD			1976
135-1	-		TICS OF				DYNAMIC CHA RISTICS UTI			*0.22					_	PARRELL/ROCK			1970
LA66	•		ALE (REM										TUNNE			•			
			NTROLLED				SMALL INCR IN ALPHA,			*		* K E	IONNE			INTERNATIONA B. WATSON	4L T		
CR-147,			MODEL 44				AND ELEVON			Ĩ		-			*-D!	-	•		
			SPACE 5			TIA, A	AND ELEVON	-		Ţ		Ţ			+ - Di	MO	•		
			STACE :			<u>.</u>				Ţ.		-			_				
			HE NASA,			Ţ.		-				-			-		-		
			OT PRESS			-		-		Ţ		-			Ţ				
			L (LA66	_		.				Ţ		Ť			-		Ī		
	* T.K.	E TOMNET	L (LA00	-		<u>.</u>		.		Ţ		-			-				
LERC	- *B	ASE DDE	SCHOE AL	T + DI 118	ME SIMULATION	*OBTA	IN DACE DAT	7 + LIE	AT - TDAN	***	25 /	* PO	CKMELL	/	*.1 1	W.FOUST/RI	-	DMS-DR	-2282
10SWT					L 19-OTS		OWER ALTITU		LA I TRAIN	*2.2		*LE			_	W.HERSEY		-	1978
038			HE 0.022		L 19-013		AN PREVIOUS			*3.5			BY 10			· · · · · · - · · · - · · ·		MEKIL,	1570
IH34			PACE SHU			-	ED OBTAIN E			+3.3			PERSON			43			
			E SIMULA				ATA ABOUT S			*			TUNNEL		*		*		
CK 131,			L 19-0TS				RALLEL POST			*		*	ONNEL		*		*		
			ASA-LEWI				ERIFY PREVI			*		*			*				
		OX 10 F00		*			SE DATA OBT			*		*			*		*	,	
	*	0,7,10,101	J. J.	*			S RECOVERY	–		*		*			*		*		
	*			*			ATURE DATA	*		*		*			*		*		
	*			*		*	TIONE DATA	*		*		*			*		*	•	
LTV	- ∗ Δ	LOW SPI	FED WIND	*ORB1	TER OB9B	*CONE	IGURATIONAL	F*F0	DRCF	*.050	/	*MS	С	/	*D.	B. WATSON	*	OMS-DR	2-2283
LSWT			EST OF A				TS STUDY FO			*.067	•	*LT		•	*-D			NOV	
422			ALE MODE				NARDS AND 1			*.067			W SPEEI		_		*	,,,,,	
MA 14			LE ORBIT				S ON ORBITE			*			NNEL		*		×	t	
			L 089B)			*089B		*		*		*			*	*	k	k	
		•	IGATE TH			*		*		*		*			*		*	k	
			INAL AND	_		*		*		*	-	*			*		*	t .	
			DIRECTIO			*		*		*		*			*		×	*	
			CTS OF C			*		*		*		*			*		n/	k	
	N	ARD AND	TAIL CO	N		*		*		*		*			*		×	k	
	F	IGUFATIO	ONAL MOD	I		*		*		*		*			*		×	r	
	*F	ICATION:	S IN THE	*		*		*		*		*			*		×	k	
	*L	TV LSWT		*		*		*		*		*			*		×	k	
	*			*		*		*		*		*			*		¥	k	

			WIND TUNNEL	TEST /	DMS DATA	PROCES	SSING					239
	*	*	*	 *		*MODEL			*	COGNIZANT	* BASI	IC
TEST	*	* CONFIGURATIONS	* TES	T *	TYPE OF			* TESTING	. *	TEST DMS	*PUBLICA	
ID	* REPORT TITLE	* TESTED	* PURPOS		TEST			* AGENCY	*	PERSONNEL	*OR COM	MENTS
		SE*INTEGRATED SPACE			TRUCT-DY	N*0.035	5 / ,	*ROCKWELL/	*J.	W. FOUST/RI	*DMS-DR-	-2284
97SWT	- *OF THE 0.035-SC	A *SHUTTLE VEHICLE	*NAMIC NOIS	E ON TH*		*0.65		*ARC -		L. KASSNER/A	RC*VOLUME	01
113	/*LE INTEGRATED S	PA+84-OTS	*E INTEGRAT	ED SHUT*		*2.5				B. MEINDERS	*MAY,	1977
	- *CE SHUTTLE VEHI		*TLE, TO ME			*		OT SUPERSON		IS	*	
IS2A/B	*E MODEL (84-OTS		*LUCTUATING	PRESSU*		*		*WIND TUNNEL	(U*		*	
CR-151,0	35*IN THE NASA-AME		*RES IN THE			*		*NITARY)	*		*	
	*RESEARCH CENTER		*R PAYLOAD I			*		*11-FOOT TRA			*	
	*NITARY PLAN WIN		*TO AERODYN			*		NIC WIND TU			*	
	*TUNNELS (IS2A/B	i) *	*FLOW ACROSS			*	,	∗L (UNITARY)	*		*	
	*	*	*ENT SYSTEM	•		*	1	*	*		*	
	*	*	*TO DEFINE			*	,	*	*		*	
	*	*	*ND AFT BUF			*	,	*	*		*	
	*	*	*DS ON THE	VERTICA*	•	*	,	*	*		*	
	* •	*	*L TAIL	*	•	*	,	*	*		*	
	*	*	*	*		*	. ,	k 	* .		*	
		SE*INTEGRATED SPACE			TRUCT-DY		•	*ROCKWELL/	_	W. FOUST/RI		
		A *SHUTTLE VEHICLE				*0.65		*ARC -		L. KASSNER/A		
113	/*LE INTEGRATED S		*E INTEGRATI			*2.5				B. MEINDERS	*MAY,	1977
	- *CE SHUTTLE VEHI		*TLE, TO ME			*		OT SUPERSON		IS	*	
IS2A/B	*E MODEL (84-OTS	•	*LUCTUATING			*		*WIND TUNNEL	(U*		*	
CR-151,0	36*IN THE NASA-AME		*RES IN THE			*		*NITARY)	*		*	
	*RESEARCH CENTER		*R PAYLOAD I	-		*		*11~FOOT TRA			*	
	*NITARY PLAN WIN		*TO AERODYN			*		NIC WIND TU			*	
	*TUNNELS (IS2A/B) *	*FLOW ACROSS			*	,	L (UNITARY)	*		*	
	*	*	*ENT SYSTEM	,		*	,	*	*		*	
	* '	*	*TO DEFINE			*	,	K	*		*	
	*	*	*ND AFT BUF			*	,	*	*		*	
	*	*	*DS ON THE	VERTICA*		*	,	k	*		*	
	*	*	*L TAIL	*		*	,		*		*	
	*	*	*	*		*	. '	*	*		*	
		S *82-0, WITH AND W			EAT-TRAN			*ROCKWELL/		QUAN/RI	*DMS-DR-	
		C*THOUT PROTUBERANG				*8.0		*AEDC -		A. SARVER	*APRIL,	1976
•	· ·	HN*ES, 50% FOREBODY				*8.Q				M. MOSER JR.	*	
OH5OA	*IQUE ON O.O4 SC		+DUE TO VAR			∓	,	D TUNNEL (B	, *-DM	15	*	
CK-144,5	95*E 50 PERCENT FO		*OTUBERANCE!	S AND K*		-			* *		*	
	*BODY MODELS (82		*ECESSIONS	*		-		•	# 		*	
	*) OF THE ROCKWE		*	*		-			*		*	
	*SPACE SHUTTLE O	K =	· #	* .		-			*		*	
	*BITER	∓	Ŧ _	*		∓			*		*	
	₹	₹	*	*		*	,	•	*		*	

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					WIND	TUNNEL TES	ST /	DMS DATA	PROCES	SSING					240
TEST		ORT TITLE		CONFIGURATION TESTED	*)NS * *	TEST PURPOSE		TYPE OF TEST		SCALE RANGE		* *	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICA* *OR COMMI	TIONS
ARC	- *DEC111.7	C OE AN A	10+0	SV ORBITER (1	100E+TO 1	ICACIIDE DD	10E +E	ODCE	*0.4	_	*ROCKWELL/	*\/	ESPARZA/ROCK	WE*DMS-DD-	2286
								UKCE	*1.2		*ARC -		D.E. THORN		1976
150-1				57-0) FOREBI					*1.2		*14-FOOT TE			*	,,,,
DA220	•	CALE ORBIT				CAL ANGLE			*				AUGUST/ROCKW		
				SV ORBITER (1					*		*L	*L	•		
UK 147,0				57-0) FOREB					*		*	*WE		*	
				ITH TPS TILES					*		*		B. LOWE	*	
				DDIFIED CONF					*		*	*-D		*	
	*EL (0)			SV ORBITER (*		*	*		*	
	*	,	-	57-0) FOREB					*		*	*		*	
	*		-	TPS. WITH AD	_	-			*		*	*		*	
	*		*Ď	THE ORBITER	ADP*LY.	A FLUSH P	ORT *		*		*	*		*	
	*		*.	FLIGHTTEST N	DSE *SYS	TEM IN THE	FOR*		*		*	*		*	
	*		*B	DOM HIIW MOD	[FIE+WAR	FUSELAGE	. AN*		*		*	*		*	
	*		*D	TPS AND TPS	FLI*D I	NSTRUMENTE	IN*		*		*	*		*	
	*		* G	HT CONFIGURA	TION*THE	RCS CHAMB	ERS *		*		*	*		*	
	*		*		*		*		*		*	*		*	
LERC	- *RESUL	TS OF BASE	H*B.	ASE HEATING	MODE*DET	ERMINE GAS	REC*H	IEAT-TRAN	S*0.04	/	*ROCKWELL/	*W.	GARTON/RI	*DMS-DR-	2288
SPF	- *EATING	3 INVESTIG	AT+L	25-0	*OVE	RY TEMPERA	TURE*		*		*LERC -		E. VAUGHN	*NOV.,	197
OH64	*IONS	ON A 0.04	SC*		*S	PRESSURE D	ISTR*		*				M. MOSER JR.	. *	
CR-151,3	884*ALE SI	PACE SHUTT	LE*		*IBU	TIONS, BAS	E HE*		*		*CILITY	*-D	MS	*	
	ORBIT	ER BASE (M	10D		*ATI	NG RATES D	URIN*		*		*	*		*	
	EL 25	-O) IN THE	N		*G 2	ND STAGE A	SCEN*		*		*	*		*	
	ASA/L	ARC SPACE	P0		*T R	ESULTING F	ROM *		*		*	*		*	
	*WER F	ACILITY	*		*PLU	ME RECIRCU	LATI*		*		*	*		*	
	* '		*		*0N	AND DIRECT	PLU*		*		*	*		*	
	*		*		*ME	IMPINGEMEN	T *		*		*	*		*	
	*		*		*		*		*		*	*		*	

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					WIND T	UNNEL "	TEST /	DMS DAT	A PROCESS	SING					241
	*		*		*				*MODEL		*	*	COGNIZANT	* BAS	IC
TEST ID	*	REPORT TITLE	* CO	NFIGURATIONS TESTED	*	TEST PURPOSI	E / .	TYPE (F * S	SCALE:		*	TEST DMS PERSONNEL	*PUBLIC *OR COM	
LAD	- +05	CILL CO OF A LAN	ID+6DAC	C CHUTTLE OD	2+TO DE	CTNC T	JE ODO	EODOE	*0.0405	= /.	*ROCKWELL/	*D	.B.RUSSELL. R.	C*DMS-DD	-2200
		SULIS OF A LAN G LOADS TEST U						PRESSUR			*NRLAD -		MENNELL/RI	*VOLUME	
1		G A 0.0405-SCA				M PRES			*0.17		*LOW SPEED			*DEC.,	1976
163	*E 1	MODEL (16-0) 0	F*			NG, TO			*	2	*TUNNEL		. B. MEINDERS	*	
- 147 , 6		E SPACE SHUTTL				IDING GI			*		*	*-	DMS	*	
	_	ORBITER IN THE				D STRU			*	•	*	*		*	
		CKWELL INTERNA				ENT LE			*	1	*	*		*	
		NAL NAAL WIND	1 *			CORD A			*	,	*	*		*	
	*UNI	NEL (0A163)	*			INFLUE			*		*			.	
	:		Ţ.			NG GEAI			.		* *			.	
	*		*			TO IN			*		*	*		*	
	*		*			OXBO A			*	,	*	*		*	
	*		*			TRUT S			*	,	*	. *		*	
	*		*			FFECTS			*		*	*		*	
	*		*		*		*		*	,	*	*		*	
LAD	+RE	SULTS OF A LAN	D*SPAC	E SHUTTLE ORE	3*TO DE	FINE TH	HE ORB	FORCE	*0.0405	5/;	*ROCKWELL/	*R	.B.RUSSELL, R.	C*DMS-DR	-2289
	_	G LOADS TEST U		140C				PRESSURE			*NRLAD -		MENNELL/RI	*VOLUME	
1		G A 0.0405-SCA				M PRES			*0.17		*LOW SPEED			*DEC.,	1976
163		MODEL (16-0) 0				NG, TO			*	3	*TUNNEL		. B. MEINDERS	*	
-147,6		E SPACE SHUTTL				DING G			*	•	*	*-	DMS	*	
		ORBITER IN THE				ID STRU			*	,	*			*	
		CKWELL INTERNA NAL NAAL WIND				IENT LEV			*		- *	*		*	
		NEL (DA163)	*			INFLUE			*		*	*		*	
	*	122 (OA 100)	*			NG GEAR			*		*	*		*	
	*		*			ER FOR			*		*	*		*	
	*		*			TO IN			*	,	*	*		*	
	*		*			OSXO A			*		*	*		*	
	*		*		*NEL S	TRUT S	MULAT	•	*	,	*	*		*	
	*		*		*ION E	FFECTS	. *	•	*	•	*	*		*	
	*		*		*		*	•	*	,	*	*		*	

	WIN	TUNNEL TES	T / DM	IS DATA	PROCESSING					242
* * TEST * * CONI ID * REPORT TITLE *	* FIGURATIONS * TESTED *	TEST PURPOSE		YPE OF TEST		* * TESTING * AGENCY		COGNIZANT TEST DMS PERSONNEL	* BASI *PUBLICA *OR COMM	ATIONS
NRLAD - *RESULTS OF A LAND*SPACE	SHUTTLE ORB*TO	DEFINE THE	ORB*FOR	CF	*0.0405 /	*ROCKWELL/	*R.1	B.RUSSELL, R.	C*DMS-DR	-2289
_SWT - *ING LOADS TEST US*ITER	•	ER LANDING G				*NRLAD -		MENNELL/RI	*VOLUME	
51 /*ING A 0.0405-SCAL*		STEM PRESSUR		JJOKE	*0.17			W.HERSEY	*DEC.,	_
DA163 *E MODEL (16-0) OF*		ADING, TO RE	_		*	*TUNNEL		B. MEINDERS	*	
CR-147,610*THE SPACE SHUTTL *		LANDING GEAR			*	*	*-D		*	
*E ORBITER IN THE *		AND STRUT H			*	*	*		*	
ROCKWELL INTERNAT		MOMENT LEVEL			*	*	*		*	
IONAL NAAL WIND T		RECORD AERO	- •		*	*	*		*	
*UNNEL (0A163) *		IC INFLUENCE			*	*	*		*	
* *		NDING GEAR O			*	*	*		*	
* *		BITER FORCE			*	*	*		*	
* *		AND TO INVES			*	*	*		*	
* *		E 40X80 ARC			*	*	*		*	
*		L STRUT SIMU			*	*	*		*	
*		N EFFECTS.	*		*	*	*		*	
* *	*		*		*	*	*		*	
NRLAD - *RESULTS OF A LAND*SPACE	SHITTLE OPRATO	DEFINE THE	ODB*FOE	CE	*0.0405 /	*ROCKWELL/	*5	B.RUSSELL. R.	C*DMS-DR	-2289
SWT - *ING LOADS TEST US*ITER		ER LANDING G				*NRLAD -		MENNELL/RI	*VOLUME	
751 /*ING A 0.0405-SCAL*		STEM PRESSUR		.33046	*0.17			W.HERSEY	*DEC.	
0A163 *E MODEL (16-0) OF*		ADING. TO RE	_		*	*TUNNEL		B. MEINDERS	* * * * * * * * * * * * * * * * * * * *	137
CR-147,614*THE SPACE SHUTTL *		LANDING GEAR			*	*	*-D		*	
*E ORBITER IN THE *		AND STRUT H			*	*	*		*	
ROCKWELL INTERNAT		MOMENT LEVEL			*	*	*		*	
IONAL NAAL WIND T	-	RECORD AERO	- •		*	*	*		*	
*UNNEL (0A163) *		IC INFLUENCE			*	*	*		*	
* *	• • • • • • • • • • • • • • • • • • • •	NDING GEAR D			*	*	*		*	
* *		BITER FORCE			*	*	*		*	
* *		AND TO INVES			*	*	*		*	
*		E 40X80 ARC			*	*	*		*	
*		L STRUT SIMU			*	*	*		*	
* *		N EFFECTS.	*		*	*	*		*	
*	+ 10				•	<u>.</u>			<u>.</u>	

	WIND TUNNEL TEST / DMS DATA	A PROCESSING		243
* * TEST * * CONFIGURATION ID * REPORT TITLE * TESTED	* * TEST * TYPE OF * PURPOSE * TEST	*MODEL * F * SCALE* TESTING *MACH RANGE* AGENCY		* BASIC *PUBLICATIONS *OR COMMENTS
LARC - *MATED AERODYNAMIC*747 ALONE V/STOL - *CHARACTERISTICS *747/ORBITER-FI 129 /*INVESTIGATION FOR*CONFIGURATION CAB *THE O.04 SCALE *47/ORBITER-AL* CR-147,641*747 CAM AND THE O*NFIGURATIONS *.0405 SCALE SPACE* *SHUTTLE ORBITER * *IN THE NASA LANGL* *EY V/STOL TRANSIT* *ION RESEARCH WIND* *TUNNEL *	, 7 *SETTING, STABILI *		*R.D. KNUDSEN/THE *BOEING CO. IT*J.LOUISSE AND J.H* W*.WALTER/THE BOEIN* *G CO. *D. A. SARVER *G. W. KLUG *-DMS *	*VOLUME 01 *NOV., 1976
** ** ** ** ** LARC - *MATED AERODYNAMIC*747 ALONE ** ** ** ** ** ** ** ** **	, 7 *SETTING, STABILI *	•	*R.D. KNUDSEN/THE *BOEING CO. IT*J.LOUISSE AND J.H* W*.WALTER/THE BOEIN* *G CO. *D. A. SARVER *G. W. KLUG *-DMS * *	*VOLUME 02 *NOV., 1976
LARC - *MATED AERODYNAMIC*747 ALONE V/STOL - *CHARACTERISTICS *747/ORBITER-FI 129	, 7 *SETTING, STABILI *		*R.D. KNUDSEN/THE *BOEING CO. IT*J.LOUISSE AND J.H W*.WALTER/THE BOEIN* *G CO. *D. A. SARVER *G. W. KLUG *-DMS * * * * * * * * * * * * * * * * * * *	⊧VOLUME 03 ⊧NOV., 1976

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				WIN	D TUNNEL TE	ST / DMS DAT	A PROCESSING			244
	*		*	*		*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*			ONFIGURATIONS *	TEST	* TYPE O				*PUBLICATIONS
ID	*	REPORT T	ITLE *	TESTED *	PURPOSE	* TEST	*MACH RANG	E* AGENCY	* PERSONNEL	*OR COMMENTS
									.D. D. HATCON	- DNC DD 0000
LARC LTPT	- *		*	*		*FORCE	*	*LARC / *LARC -	*D.B. WATSON *-DMS	*DMS-DR-2292 *TO LRC
214	- /*		*			*	*	*LOW-TURBULEN	- · · · -	*
LA36B	*		*	*		*	*	*PRESSURE TUN		*
LAGOD	*		*	*		*	*	*EL	*	*
	*		*	*		*	*	*	*	*
AEDC	- *	RESULTS OF	TESTS *MOD	EL 75-0TS (72-*TO	OBTAIN PRO	XIMI*FORCE	*0.010 /	*ROCKWELL/	*J. J. DAILEDA, C	J.*DMS-DR-2293
SWTA	- *	JSING A O.	010-SCA+0 W	ING. 140C MOD. *TY	FORCE AND	MOME *	*4.5 -	*AEDC -	*MARROQUIN/RI	*DEC., 1977
K1A	/*	LE SSV MOD	EL 75-0*FUS	ELAGE, ET, SR +NT	DATA FOR E	T AN*	*	*SUPERSONIC W	IN∗J. E. VAUGHN	*
I A 4 O	*	TS IN THE	AEDC VK*B)	*D	SRB WITH SR	B SE*	*	*D TUNNEL (A)	*M. M. MOSER JR.	*
CR-151.:	381*	F TUNNEL A	*	*P#	RATION MOTO	R PL*	*	*	*-DMS	*
	*		*	*UN	IE EFFECTS	*	*	*	*	*
	*		*	*		*	*	*	*	*
NRLAD				A/B SS ORBITER*TO				*ROCKWELL/	*M. T. HUGHES/RI	
LSWT			•	DEL 43-0) ORB *IF				*NRLAD -	*D.W.HERSEY	*VOLUME 01 *JUNE. 1981
752				R FERRY CONFIG*LI			* 0.26	*LOW SPEED WI	ND*G. W. KLUG *-DMS	*JUNE, 1981
DA 172 CR- 160 (G A 140A/B	ON USIN*URA		MARACTERISTI OTH IN AND C		-	* I UNINEL	*-DM2	- -
CK-100,		SCALE MOD			THE PRESENC		*	*	*	*
		O) IN THE			IE GROUND. W			*	*	*
		LINTERNAT			E FERRY CON		*	*	*	*
		.75 X 11 F			ATION AFTER		*	*	*	*
		SPEED WIND			STALLED	*	*	*	*	*
	*	L (OA172)	*	*		*	*	*	*	*
	*		*	*		*	*	*	*	*
NRLAD	- *	RESULTS OF	TESTS *140	A/B SS ORBITER*TO	DEFINE AND	VER*FORCE	* 0.0405 /	*ROCKWELL/	*M. T. HUGHES/RI	*DMS-DR-2294
LSWT	- *	DF A SPACE	SHUTTL*(MO	DEL 43-0) ORB *IF	Y ORBITER S	TABI*PRESSURE	*0.13 -	*NRLAD -	*D.W.HERSEY	*VOLUME 02
752				R FERRY CONFIG*LI			* 0.26		ND*G. W. KLUG	*JUNE, 1981
OA 172			ON USIN+URA		IARACTERISTI		*	*TUNNEL	*-DMS	*
CR-160,		G A 140A/B			TH IN AND C		*	*	* .	*
		-SCALE MOD	•		THE PRESENC		*	*	*	*
		O) IN THE			E GROUND, W		*	*	*	*
		LINTERNAT			E FERRY CON		*	平 山	÷	*
		.75 X 11 F SPEED WIND			RATION AFTER	* אַעטמי	*	*	*	*
		L (OA172)	10111112 +		ISTALLED	*	7	*	*	*
				•		~	-	**	•	•

							¥					
			WIND TUNNE		MS DATA F	ROCESSI	 ING					245
TEST ID	* * * * * * * * * * * * *	* * CONFIGURATIO * TESTED	* DNS * TE: * PURP		TYPE OF *	MODEL SO		TESTING AGENCY	* * *	COGNIZANT TEST DMS PERSONNEL	* BASI *PUBLICA *OR COM	ATIONS
EDC VTA 1A	- *RESULTS OF AN IN - *ESTIGATION OF TH /*SPACE SHUTTLE IN	E*ORBITER ALONE	B6+0COUPLE T	EST WAS *	*	0.0175 3.01 -	*A	DCKWELL/ EDC - UPERSONIC WI	*INT	ERNATIONAL	WELL*DMS-DR- *VOLUME INC*SEPT	01
141B	*TEGRATED VEHICLE	*8W116	*IN HEAT-TI	RANSFER *	4			TUNNEL (A)	*.	·	*	,
1-151,0	69*AERODYNAMIC HEAT NG CHARACTERISTI*				*	r k	*			A. SARVER W. KLUG	*	•
	*S OBTAINED USING		*ED VEHICL		*	*	*		*-DM	s	*	
	*THE O.O175-SCALE *MODEL 60-OTS IN		*THE ASCEN *OF ITS FL		*	k k	*		*		*	
	*EDC TUNNEL A DUR		*FILE	*	*	*	*		*		*	
	*NG TESTS IH41B	*	• •	*	*	k	*		*		*	
DC	* - *RESULTS OF AN IN	* V*FT ALONE T34	* *A THIN-SK	* IN THEDM*HE	* *2NADT-TA	K KO 0175	* / *P	DCKWELL/	* *W ⊔	DAE / BUCK!	* WELL*DMS-DR:	-2295
NTA	- *ESTIGATION OF TH					3.01 -		EDC -		ERNATIONAL		
A	/*SPACE SHUTTLE IN				*	4.01	*S	UPERSONIC WI		. NUTT/ARO	INC*SEPT.,	1977
418	*TEGRATED VEHICLE		IN HEAT-TI		1		*D	TUNNEL (A)		A CARVER	*	
-151,0	70*AERODYNAMIC HEAT *NG CHARACTERISTI				,	r k	*			A. SARVER W. KLUG	*	
	*S OBTAINED USING		*ED VEHICL		*	*	*		*-DM		*	
	*THE O.0175-SCALE		*THE ASCEN		*	k	*		*		*	
	*MODEL 60-OTS IN *EDC TUNNEL A DUR		*OF ITS FL	IGHT PRO*	*		*		*		*	
	*NG TESTS IH41B		*	*	•		*		*		*	
	*	*	*	*		×	*		*		*	
DC VTA	- *RESULTS OF AN IN - *ESTIGATION OF TH		*A THIN-SK			0.0175 3.01 -		DCKWELL/ EDC -		. DYE/ROCKI ERNATIONAL	√ELL*DMS-DR VOLUME*	
A	/*SPACE SHUTTLE IN			-		4.01		UPERSONIC WI				
14 1B	*TEGRATED VEHICLE		*IN HEAT-TI		*	•	*D	TUNNEL (A)	-	•	*	
-151,0	71*AERODYNAMIC HEAT				*		*			A. SARVER	*	
	*NG CHARACTERISTI *S OBTAINED USING		ED VEHICLI*		**	•	*	•	*G. \ *-DM	W. KLUG	*	
	*THE 0.0175-SCALE		*THE ASCEN			r	*		*	•	*	
	MODEL 60-OTS IN	A	*OF ITS FL	GHT PRO*	*	•	*		*		*	
	*EDC TUNNEL A DUR *NG TESTS IH41B		*FILE	*	*		*		*		*	
	*NG 15515 1H418	*	*	*	*		*		*		*	
	*,		•	·	·		•		-		•	

							WIND TU	NEL TEST		DMS DATA	PROCES	SING						246
		*		*			*		*		*MODEL		*	*	COGNIZANT	*	BASI	:C
TEST		*		*	CONFIGL	RATIONS	*	TEST	*	TYPE OF			* TESTING	*	TEST DMS	* [UBLICA	
ID		* REPOR	RT TITU	-E *	TES	TED	* P	JRPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*(OR COMM	IENTS
												· 	 					
AEDC	_	*DESIII T	S OE A1	J [KIV/#E	T ALONE	T24	+ A TLITNI	-CUIN THE	DM+	UCAT_TOAN	S+0 047	, ,	*ROCKWELL/	لياند	.H. DYE/ROCK	JE 1 * F	MS-ND-	2295
SWTA										REAT TIKAN	*3.01		*AEDC -		NTERNATIONAL		OLUME	
A4A						OM16R18V					*4.01				.W. NUTT/ARO			-
IH4 1B		*TEGRATI						T-TRANSFE			*		*D TUNNEL (•	*	,,,	
						TANK B6					*		*		. A. SARVER	*		
• • • • • • • • • • • • • • • • • • • •						OM 16R 185					*		*	_	. W. KLUG	*		
					23T34V8W1		-	ICLE DURI			*		*		DMS	*		
		*THE 0.0						CENT PHAS			*		*	*		*		
		MODEL (60-0TS	IN A				FLIGHT P	_		*		*	*		*		
		EDC TUI	NNEL A	DURI			*FILE		*		*	•	*	*		*		
		*NG TES	TS IH4	1B *			*		*		*		*	*		*		
		*		*			*		*		*		*	*		*		
AEDC	-	*RESULTS	S OF A	N INV*E	ET ALONE	T34	*A THIN	-SKIN THE	RM*	HEAT-TRAN	S*0.017	75 /	*ROCKWELL/	* W	.H. DYE/ROCK	WELL*	DMS-DR-	·2295
SWTA	-	*ESTIGA	TION O	F THE*C	ORBITER A	LONE B6	*OCOUPL	E TEST WA	S *		*3.01	-	*AEDC -	* I	NTERNATIONAL	*1	VOLUME	05
A4A	_/	*SPACE !	SHUTTLI	E IN *2	2C12E52F1	IOM16R18V	*CONDUC	TED TO OB	TA*		*4.01		*SUPERSONIC	WIN*K	.W. NUTT/ARD	INC*	DCT.,	1977
IH4 1B		*TEGRAT!	ED VEH	ICLE *8	3W116		*IN HEA	T-TRANSFE	R *		*		*D TUNNEL (*		
CR-151,	273	*AERODYI	NAMIC F	HEATI*C	ORBITER 4	TANK B6	*DATA O	N THE SPA	CE*				*		. A. SARVER	*		
		*NG CHAI	RACTER	ISTIC*2	2C12E52F	IOM 16R 185	*SHUTTL	E INTEGRA	T *		* *		*		i. W. KLUG	*		
						116					*		*	*-	DMS	*		
		*THE O.						CENT PHAS			*		*	*		*		
		MODEL	_					FLIGHT F	RO		*		*	*		*		
		*EDC TU					*FILE		*		*		*	*		*		
		*NG TES	TS IH4	1B *			*		*		*		*	*		*		
		*					*		*		*		*	*		*		
LARC										PRESSURE					ERNARD SPENC			
LTPT						. OF A O8					*.20		*LARC -		ORGE M. WARE			
229	-					SURATION					*.30		*LOW-TURBUL				AUGUST,	, 1976
LAS1						39B CONFI			_		*				. H. LINDAHL	*		
CR-147,						NOSE FOR					*		*EL	*-	DMS	*		
						.s. 500.					*		*	*		*		
		*SA/LAR						ON OVER 1 NE FOR S1			* •			-		-		
		*NNEL (KE 1U+ *				L DESIGN			-		-	-		- T		
		+1414CF (LAGI	Ī				.AND TO [-	- -		*		
		*		*				THE INTE			*		*	*		*		
		*		*				EFFECTS			*		*	*		*		
		*		*				TYPES OF			*		*	*		*		
		*		*				NEL MOUNT			*		*	*		*		
		*		*				NIQUES ON			*		*	*		*		
		*		*			*HE TAI		*	t	*		*	*		*		
		*		*			*		*	t	*		*	*		*		

247			ROCESSING	DMS DATA	TUNNEL TEST /	WIN			. 	
*PUBLICATIONS	COGNIZANT TEST DMS PERSONNEL		MODEL * SCALE* MACH RANGE*	TYPE OF	TEST * PURPOSE *	CONFIGURATIONS * TESTED *	* RT TITLE *	REPOR	*	TEST ID
*AUGUST, 1976	EORGE M. WARE/LA C	ARC - * OW-TURBULENCE* RESSURE TUNN *	.30 *1		NSITIVITY OF TH* TAILCONE TO CHA* ES IN REYNOLDS * MBER,DETERMINE *	*TA *UC *RP *ER! *ER! *TH! *ND *G	PRESSURE DI*T TION AT LOW*9 IC SPEEDS *W .03614-SCAL*G L IN THE NA*W C LOW TURBU* PRESSURE TU*	CONE P STRIBUT SUBSONI OF A O. MODEL SA/LARC	- *[/*3 *5 610*6 *5 *1	ARC TPT 29 AB1 R-147,6
* SPE*DMS-DR-2297 *NOV., 1976 * * * * * * * * * * * * * * * * * *	NCER/LARC	ARC - * NITARY PLAN W* ND TUNNEL *	3.7 ∗เ		** FOR LINEARIZAT* N OF ORBITER AE* DYNAMIC CHARACT* ISTICS * * * * * * * * * * * * * * * * * *	ILLET SWEEP *ES *10! *RO!	WERSONIC A*W AMIC CHARAC*F ICS OF FIVE* LAR PLANFO * GS WITH SYS* CALLY VARYI* G FILLET GE* TESTED IN * SA/LARC 4-F* WT (LEG 2) * /B) *	ERODYNA FERISTI FREGUL RM WING FEMATIC NG WING DMETRY THE NAS	- *E /*1 /*1 628*F *1 *N *0 *1	.ARC JPWT 1445 .A45A/B :R-147,6

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			248
							·	
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST		* CONFIGURATIONS		* TYPE OF		E* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE	E* AGENCY	* PERSONNEL	*OR COMMENTS
LARC	- *LOW SPEED STABIL	T*SSV OPRITED MODE	I *TO DETERMINE LOW	-*ENDCE	*0.015 /	*LARC /	*BERNARD SPENCER/	/L *DMS-DR-2298
LTPT	- *TY AND CONTROL C		*SPEED STABILITY		*0.25 -	*LARC -	*ARC	*MAY. 1978
227	/*ARACTERISTICS OF		*ND CONTROL CHARA		*0.25	*LOW-TURBULENCE		*
LTPT	- *A 0.015 SCALE MO		*TERISTICS OF THE		*	*PRESSURE TUNN	- ·	*
238	/*EL 69-0 OF THE S		*SPACE SHUTTLE OF		*	*EL	*-DMS	*
LA73A	*ACE SHUTTLE ORBI		*ITER WITH FOREBO		*	*LOW-TURBULENCE		*
LA73B	*ER WITH FOREBODY		*Y RSI MODIFICATI		*	*PRESSURE TUNN	*	*
	409*RSI MODIFICATION		*NS	*	*	*EL	*	*
•	*IN THE NASA/LARC		*	*	*	*	*	*
	LOW TURBULENCE P	R	*	*	*	*	*	*
	ESSURE TUNNEL (L	Α	*	*	*	*	*	*
	*73A/B)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
LARC	- *DYNAMIC STABILIT	Y*ORBITER/747 FERR	Y*TO MEASURE PITCH	1.*FORCE	*0.015 /	*LARC /	*D. C. FREEMAN, C	JR*DMS-DR-2299
710HST	- *CHARACTERISTICS	*VEHICLE	*YAW, ROLL DAMPIN	1 *	*0.2 -	*LARC -	*., R. P. BOYDEN/	'L*JUNE, 1977
999	/*OF THE COMBINATI	O* [']	*G, NORMAL FORCE	D*	*0.5	*HIGH SPEED 7 I		*
LABO	*N SPACE SHUTTLE	0*	*UE TO PITCH RATE	Ξ,*	*	*Y 10-F00T TUN	N*R. H. LINDAHL	*
TM-X	*ORBITER AND FERR	!Y*	*AND YAWING MOMEN	1T*	*	*EL	*-DMS	*
3497	*COMBINATION	*	*DUE TO ROLL RATE	*	*	*	*	*
	*	*	*AND ROLLING MOME		*	*	*	*
•	*	*	*NT DUE TO YAW RA	\ T*	*	*	*	*
	*	*	*E	*	*	*	*	*
	*	*	*	*	*	*	*	*
LARC	- *LOW-SUBSONIC STA					*LARC /	*B. SPENCER, JR.,	
LTPT	- *ILITY AND CONTRO				*0.15 -	*LARC -	*G. WARE/LARC	*OCT., 1976
228	/*CHARACTERISTICS		*DATA BASE FOR CL	-	*0.25		E*W. B. MEINDERS	*
LA61B	*OF A O.O15-SCALE		*RRENT SS CONFIGU	JR*	*	*PRESSURE TUNN	*-DMS	*
CR-147,	629*REMOTELY CONTROL	-	*ATION	*	*	*EL	*	*
	*ED EI EVON MODEL	3	*	*	*	*	*	*
	*44-0: OF THE SPA		*	*	*	*	*	*
	*E SHUTTLE ORBITE		*	*	*	*	*	*
	*IN THE LANGLEY F		#	*	*	*	*	* .
	*ESEARCH CENTER L		*	*	*	.*		*
	W TURBULENCE PRE	.5	*	*	*	*	*	*
	*SURE TUNNEL	# 	· ·	*	* .	*	*	*
	₹	*	*	* .	*	*	*	*

			WIND TL	INNEL TEST /	DMS DA	TA PROCESSI	NG			249
	*	*	*		*	*MODEL	*	*	COGNIZANT	* BASIC
TEST	*	* CONFIGU	RATIONS *	TEST	* TYPE)F * \$0	ALE* TES	TING *	TEST DMS	*PUBLICATIONS
ID	* REPORT TITE	E * TES	TED * F	PURPOSE	* TEST	*MACH RA	NGE* AGE	NCY *	PERSONNEL	*OR COMMENTS
AEDC	- *RESULTS OF PH	HASE *MODELS 82	-13. *TO DET	ERMINE THE	*HEAT-TR	ANS*0.040	/ *ROCKW	ELL/ *W.	H. DYE/RI	*DMS-DR-2301
HWTB	- *CHANGE PAINT					*7.93 -		•	HUBE, D. CARY	
82A	/*TRANSFER TEST					*8.00	*HYPER	SONIC WIN*R/		*
OH54A	*TILIZING O.O4	O SC*DIES	*NTS ON	I BOUNDARY L	*	*	*D TUN	NEL (B) *D.	A. SARVER	*
CR-144,	605*ALE 50 PERCE	NT FO*	*AYER T	RANSITION	*	*	*	*M.	M. MOSER JR.	*
	REBODY MODELS	S (NO	*		*	*	*	*-D	MS	*
	. 82-0) OF TH	IE RO	*		*	*	*	*		* 1
	*CKWELL INTER	*OITAN	*		*	*	*	*		*
	NAL SPACE SHU	JTTLE	*		*	*	*	*		*
	*ORBITER IN A	EDC *	*		*	*	*	*		*
	VKF HYPERSON	C TU	*		*	*	*	*		*
	*NNEL B	*	*		*	*	*	*		*
	*	*	*		*	*	*	*		*
ARC	- *RESULTS OF TE	STS *ORBITER V	EHICLE 1*OBTAIN	STABILITY	*FORCE	*0.36	/ *ROCKW	ELL/ *R.	L.MAKI/ARC	*DMS-DR-2302
40SWT	- *USING A 0.36	-SCAL*O1 WITH T	AIL CONE*AND CO	NTROL FORCE	*PRESSURI	*0.114-	*ARC	- *T.	J.DZIUBALA/R.J	.*VOLUME O1
479	/*E MODEL(76-0)) OF *ORBITER V	EHICLE 1*, MOME	NT AND CONT	*	*0.264	*40-F0	OT BY 80-*S.	R. HOULIHAN	*MAY, 1982
OA 174	*THE SPACE SHU	JTTLE*01 WITH O	UT TAIL *ROL SL	RFACE HINGE	*	*	*FOOT	SUBSONIC *C.	R. EDWARDS	*
CR-167.	340*ORBITER VEHIC	CLE *CONE	*MOMENT	DATA; VER	*	*	*WIND	TUNNEL *-D	MS	*
	101 IN THE NA	\SA/A	*IFY AN	D MEASURE L	*	*	*	*		*
	MES RESEARCH	CENT		GEAR STRUT		*	*	*		*
	*ER'S 40 X 80		*AND DO	OR PRESSUR	*	*	*	*		*
	*ONIC WIND TU	NEL *	*ES; 08	STAIN TAIL C	*	*	*	*		*
	*(OA174)	*	*ONE PR	ESSURE DIST	*	*	*	*		*
	*	*	*RIBUTI	ONS; CALIBR	*	*	*	*		*
	*	*	*ATE BA	SELINE AND	*	*	*	*		*
	*	*	*ALTERN	ATE AIR DAT	*	*	*	*		*
	*	*	*A SYST	EMS	*	*	*	*		*
	*	*	*		*	*	*	*		*

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						WIND	TUNNEL TES	iT /	DMS DATA	PROCES	SING					250
	*			*		*		*		*MODEL	_	· · · · · · · · · · · · · · · · · · ·	*	COGNIZANT	* BASI	C
TEST	*			* C0	ONFIGURATION	IS *	TEST	*	TYPE OF	*	SCALE*	* TESTING	*	TEST DMS	*PUBLICA	TIONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE*	AGENCY	*	PERSONNEL	*OR COMM	ENTS
RC	- *	RESULTS (OF TESTS	*ORB	ITER VEHICLE	1*0BT	AIN STABILI	TY *F	ORCE	*0936	/ ,	ROCKWELL/	*R.	L.MAKI/ARC	*DMS-DR-	2302
OSWT					WITH TAIL CO		-				•	ARC -		J.DZIUBALA/R.I		
79					ITER VEHICLE					*0.264		40-FOOT BY 80		•	*MAY.	1982
A174		•	•		WITH OUT TAI					*		FOOT SUBSONIC			*	
R-167.		ORBITER					ENT DATA: \			*	,	WIND TUNNEL	*-D	MS	*	
,		101 IN TI			= '	-	AND MEASUR	-		*	,	k	*		*	
		MES RESE					ING GEAR ST			*	,	k	*		*	
		ER'S 40					DOOR PRESS			*	,	*	*		*	
		ONIC WIN		_			OBTAIN TAI			*	,		*		*	
		(DA174)	- 10111166	* .			PRESSURE D			*		*	*		*	
	*	(=1111)		*			BUTIONS: CAL			*	,	*	*		*	
	*			*		-	BASELINE A			*	,	k	*		*	
	*			*			ERNATE AIR			*	2	*	*	i	*	
	*			*			YSTEMS	*		*	,	*	*		*	
	*			*		*		*		*		•	*		*	
EDC	- *	RESULTS (DE PHASE	*MOD	ELS 82-1, -4	. *TO	DETERMINE :	THE *I	HEAT-TRAN	S*0.030	o / :	*ROCKWELL/	*W.	H. DYE/RI	*DMS-DR-	2303
WTB					PERCENT FORE	•				*8	-	*AEDC -		CARTER/ARO	*MAY.	1976
3A		S OF 0.0					RCS NOZZLI			*8		*HYPERSONIC WI			*	
H75	•	50 PERCEI	_		•		TUBERANCES			*		*D TUNNEL (B)			*	
		DY MODEL					PENETRATION			*	:	*	*-D		*	
,		OF THE S				_	RODYNAMIC H			*	:	*	*		*	
		TLE ORBI					RATES DUR			*		*	*		*	
		E AEDC VI					ULATED ENTI			*		*	*		*	
		PERSONIC					DITIONS	*		*		*	*		*	
		NEL	***************************************	*		*		*		*	:	*	*		*	
	*			*		*		*		*		*	*		*	
ARC .	- *	RESULTS 1	OF TESTS	*TAT	LCONE-ON	*T0	EVALVATE M	ากรเ.*เ	FORCE	*0.030	0 /	*ROCKWELL/	*R.	L. GILLENS, T	. *DMS-DR-	2304
2PT		TO EVALU					PORT SYSTE			* .26		*ARC -		DZIUBALA, R.		
80-1		0X80-F00					S FOR TEST			* .20				MULFINGER/RI		
A173	•	SUPPORT					THIS TEST			*		*RE TUNNEL		R. EDWARDS	*	
		ES ON TH					TH 40X80 FO			*		*	*-D		*	
		HUTTLE V					JTS AND WIN			*		*	*		*	
		TH TAIL					S IN AND O			*		· *	*		*	
		G A 0.03					DETERMINE TH			*		· *	*		*	
		DEL (45-		_			ECT ON THE			*		· *	*		*	
		NASA/ARC	•				ER TAILCONE	_		*		*	*		*	
		PRESSURE					NFIGURATION			*		· *	*		*	
		NNEL (DA		*		*	AGUINI AUN	*		*		· *	*		*	
		(07	,	•		•				· ·		•				

		WIND TUNNEL TEC	T / DUC DATA	DDDCECTNC			251
		WIND TUNNEL TES	TI / DMS DATA	N PROCESSING			201
* TEST * ID * REPORT TITL	* * CONFIGURATION E * TESTED	* 4S * TEST * PURPOSE	* * TYPE OF * TEST		* E* TESTING E* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
	NUM*B26C9E43F8M16N2		_		*LARC /	*M. M. MANN	*DMS-DR-2305
SWT - *BER TRANSONIC		*YNOLDS NUMBER		*0.6 -	*LTV -	*-DMS	*VOLUME O1
73 /*BILITY AND CO A76 *L CHARACTERIS		*NSONIC AERODYN *C DATA ON CONT		*2.9 *	*HIGH SPEED WIN *D TUNNEL	(*	*JUNE, 1977
R-151.059*OF A 0.015 SC		*SURFACE LINEAR		*	*O TOMNEL	* 1	*
*REMOTELY CONT		*AND SENSITIVIT		*	*	*	*
*ED ELEVON) MO		*TO MACH NUMBER		*	*	*	*
44-0 OF THE S	PACE	*R FINE-CUT SPE	ED *	*	*	*	*
SHUTTLE ORBIT	ER T	*BRAKE, BODY FL	AP *	*	*	*	*
*ESTED IN THE		*AND RUDDER DEF		*	*	*	*
HIGH SPEED TU	NNEL	*TIONS; TO INVE		*	*	*	*
*(LA76)	*	*GATE THE INTER		*	*	*	*
*	*	*ACTIVE EFFECTS		*	*	*	*
	*	*MUTUAL CONTROL	_	*	*	*	*
*	*	*URFACE DEFLECT *S	ION*	*	*	-	*
		*3 *	*	*	*	*	*
V - *HIGH REYNOLDS	NUM*B26C9E43F8M16N2	SR*TO ORTAIN HIGH	I RF*	*0.015 /	*LARC /	*M. M. MANN	*DMS-DR-2305
T - *BER TRANSONIC		*YNOLDS NUMBER		*0.6 -	*LTV -	*-DMS	*VOLUME 02
3 /*BILITY AND CO		*NSONIC AERODYN		*2.9	*HIGH SPEED WIN	1*	*JUNE, 1977
76 *L CHARACTERIS	TICS*	*C DATA ON CONT	ROL*	*	*D TUNNEL	*	*
-151,060*OF A 0.015 SC	ALE(*	*SURFACE LINEAR	ITY*	*	*	*	*
*REMOTELY CONT		*AND SENSITIVIT		*	*	*	*
*ED ELEVON) MO		*TO MACH NUMBER		*	*	*	*
*44-0 OF THE S		*R FINE-CUT SPE		*	*	*	*
*SHUTTLE ORBIT		*BRAKE, BODY FL		*	*	*	*
*ESTED IN THE *HIGH SPEED TU		*AND RUDDER DEF *TIONS; TO INVE		*	* •	*	*
*(LA76)	*	*GATE THE INTER		*	*	*	*
*	*	*ACTIVE EFFECTS		*	*	*	*
*	*	*MUTUAL CONTROL		*	*	*	*
*	*	*URFACE DEFLECT	-	*	*	*	*
*	*	* S	*	*	*	*	*
*	*	*	*	*	*	*	*

						WIND	TUNNEL TES	51 /	DMS DATA	PROCES	SING					252
	*			*		*		*		*MODEL		*	*	COGNIZANT	* B	ASIC
TEST	*			*	CONFIGURATIONS		TEST	*	TYPE OF		SCALE		*	TEST DMS		ICATIONS
. ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR C	DMMENTS
С	- *R	ESULTS	OF TESTS	*0	- B26C9E44F9M10	S*THE	PURPOSE OF	* TH*	FORCE	*0.030	0 /	*ROCKWELL/	*P.	J. HAWTHORNE,	R*DMS-I	DR-2306
			PACE SHL				EST WAS TO			*1.55	-	*ARC -	*.F	. BURROWS, M.	. *VOLU	ME 01
4-1	/*T	LE LAUN	ICH CONFI	G*T	- AT28AT29AT30	A*TAIN	PRESSURE	DIS*		*2.20		*11-FODT, 9-	F00*N1	CHOLS /RI	*MAY,	1982
135A/B	/C+U	RATION	USING TH	E*T	31AT32AT128FL10	**TRIB	UTIONS, IN	*VIO		*		*T, 8-F00T,	UNI*D.	L. KASSNER, J	. ປ∗	
-167,3					I 1FR 10PT22PT23P					*				BROWNSON /ARC	*	
		_			IPT25PT26PT27T3		•	•		*		*EL		A. SARVER	*	
					- N86S21PS13PS					*		*		W. KLUG	*	
				•	S20PS21PS22PS2					*		*	*-[DMS	*	
	*I	A 135A/E	(C)	*P3	S24PS25PS26		DATA WERE	: UB*		*		* •	*		*	
	*			∓		*TAIN	EU.	*		*		*	*		*	
С	- ±p	FSIII TS	NE TESTS	. *∩	- B26C9E44F9M1	*THE	DIIDDUCE UI	* !*H+!	FORCE	*0.030	0 /	*ROCKWELL/	*D	J. HAWTHORNE.	R*DMS-	DR-2306
			PACE SHU	-			EST WAS TO			*1.55	- ,	*ARC -		R. BURROWS, M.		
4-1					- AT28AT29AT30			_	, KESSOKE	*2.20		*11-F00T, 9-			*MAY.	
					31AT32AT128FL10					*				L. KASSNER, J		
	•				11FR10PT22PT23P					*				BROWNSON /ARC		
					PT25PT26PT27T3					*		*EL	*D.	. A. SARVER	*	
	* \$	A/AMES	UNITARY	P*S	- N86S21PS13PS	1*EVON	LOADS. PI	RESS*		*		*		. W. KLUG	*	
	*L	AN WINE	TUNNEL	(*6	S20PS21PS22PS2	3∗URE,	FORCE AND	*OM C		*		*	* -[DMS	*	
	* I	A135A/E	3/C)	*P	S24PS25PS26		DATA WERE	E OB*		*		*	*		*	
	*			*		*TAIN	ED.	*	•	*		*	*		*	
_	*			*		*		*	50005	*		*	*	LUANTHODAG	*	DD 0000
				_	- B26C9E44F9M1					*0.030 *1.55		*ROCKWELL/ *ARC ~		.J. HAWTHORNE, R. BURROWS. M.		
,9/,8/ 4-1			SPACE SHU		- AT28AT29AT30		EST WAS TO			*2.20		*11-FOOT, 9-			*MAY.	
					31AT32AT128FL10					*				L. KASSNER. J	-	1502
•					11FR10PT22PT23P		- •			*				BROWNSON /ARC		
,.					4PT25PT26PT27T3			_		*		*EL		. A. SARVER	*	
					- N86S21PS13PS		•	•		*		*	*G	. W. KLUG	*	
	*L	AN WIND	TUNNEL	(*6	S20PS21PS22PS2	3∗URE,	FORCE AND	* OM C		*		*	*-[DMS	* .	
	* I	A 135A/E	3/C)	*P	S24PS25PS26		DATA WER	E OB*		*		*	*		*	
	*			*		*TAIN	ED.	*		*		*	*		*	
	*			*		*		*		*		*	*		*	
										•						
												1				

)		* *)				
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			253
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE		* TEST DMS	* BASIC *PUBLICATIONS *OR COMMENTS
TBCA BTWT 1496	- *RESULTS OF EXPER - *MENTAL AERODYNAM /*C INVESTIGATION	I*TYPE II MODIFICA		*				*DMS-DR-2307 *VOLUME 01 *SEPT 1981
1497 CA14A CR-160,8	340*CAM WITH SPACE S	*BOEING 747 CAM/0 H*BITER - ALT CONF			* * *		*G. R. LUTZ *-DMS *	* * *
	*THE BOEING	*GURATION *BOEING 747 CAM/C N*BITER ~ FERRY CC C*FIGURATION	R*	* * *	* * *	* * *	* * *	* * * *
	*A14A) *	*ORBITER ALONE LE *S TAILCONE (MOD *L 45-0)		* * *	* :	* *	*	* *
TBCA BTWT 1496	* - *RESULTS OF EXPER - *MENTAL AERODYNAM	I*TYPE II MODIFICA		*	*0.3 -	*TBCA -		*VOLUME 02
1497 CA14A	/*N A O.O3 SCALE	*07) *BOEING 747 CAM/0	*FERRY AND ALT R*CONFIGURATION WIT	* T*			*U. E. VAUGHN *G. R. LUTZ *-DMS *	*SEPT., 1981 * *
	*UTTLE ORBITER IN *THE BOEING *8X12 FOOT TRANSO	*GURATION *BOEING 747 CAM/C N*BITER - FERRY CO	*E ON. R*	* *	* :	* * *	* * *	* * *
	*IC WIND TUNNEL (*A14A) *	C*FIGURATION *ORBITER ALONE LE *S TAILCONE (MOD *L 45-0)	-	* * *	* :	* * *	* * *	* * *
	*	*	*	*	* ;	* *	*	* .

					WIND T	UNNEL TE	ST /	DMS DATA	PROCESSI	NG					254
	*		*		*		*		*MODEL	4	*	*	COGNIZANT	* BAS	IC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	* SC	CALE	* TESTING	*	TEST DMS	*PUBLIC	ATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH RA	NGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
LSPAN	- ∗ ∆	N EXPERIMENTAL	. D*1	19-0TS	*TO DE	TERMINE	HEAT*	PRESSURE	*0.0225	/ *	*ROCKWELL/	*R.	F. DRZEWIECKI	:/*DMS-DR	-2308
HST	- *E	TERMINATION IN	1 T*			FER AND			*4.5 -	•	*CALSPAN -		_SPAN	*OCT	1976
11	/*H	IE CALSPAN LUDW	IE*		*SSURE	DISTRI	SUTIO*		*4.5			ERS∗J.	W. FOUST/RI	*	
15	•	TUBE OF THE E				BASE OF			*		*ONIC SHOCK			*	
- 147, E	36×E	ENVIRONMENT C)F *		*VEHIC	LE DURI	VG SI*		*	*	*NEL	*M.	M. MOSER JR.	*	
	* T	HE INTEGRATED	SP*		*MULAT	ED LAUNG	CH TR*		*	×	*	*-DN	4S	*	
	* A	CE SHUTTLE VEH	IIC*		*AJECT	ORY CON	*OITIC		*	*	*	*		*	
	* L	E AT SIMULATED) M*		*NS OF	MACH 4	.5 AN*		*	*	*	*		*	
	* A	CH 4.5 FLIGHT	CO*		*D PRE	SSURE AT	_TITU*		*	*	*	*		*	
	1	DITIONS (TEST	IH		*DES B	ETWEEN 9	*00,00		*	*	*	*		*	
	5	OF MODEL 19-0	TS		*O AND	210,000) FEE+		*	*	*	*		*	
	*)	1	*		*T 606	6. HOURS	51.*		*	*	*	*		*	
	*		*		* 152		*		*	*	*	*		*	
	*		*		*		*		*	,	*	*		*	
RC	- *T	RANSONIC STAB	LI*F	OREBODY B1, B6,	*TO DE	TERMINE	POSS*	FORCE	*0.015	/ ,	*LARC /	*W.1	P.PHILLIPS/LA	RC*DMS-DF	2309
PT	- *T	Y AND CONTROL	CH*E	37	*IBLE	ADVERSE	AERO*		* 0.35-	,	*LARC -	*C.	R. EDWARDS	*NOV.,	1970
0	/*A	RACTERISTICS ()F *		*DYNAM	IC EFFE	CTS O*	•	* 1.20		*8-FOOT TRAN	ISON*-DI	MS	*	
72		O.015 SCALE				GHT REDI			*		*IC PRESSURE	TU*		*	
?-147,€		L 69-0 OF THE				THE THIS			*	,	*NNEL	*		*	
		ICE SHUTTLE ORE				THE REU			*	,	*	*		*	
		R WITH FOREBOD		•		CE INSU			*	,	*	*		*	
		RSI MODIFICATION				SI) LOC			*	,	*	. *		*	
		N THE NASA/LAF				THE SI			*	3	*	*		*	
	8	B-FCOT TPT (LAT	72)			SPACE			*	•	*	*		*	
	*		*			BITER F	JSELA*		*		*	*		*	
	*		*		*GE FO	REBODY	*		*	,	*	*		*	
	*		*		*		*		*	,	*	*		*	

) .)								
							WIND	TUNNEL TES	「 / 	DMS DATA	PROCES	SING						255
TEST ID	* *	REPORT 1	TITLE	* * *	CONFIGUR TEST		* *	TEST PURPOSE	* * *	TYPE OF TEST	*MODEL * *MACH	SCALE			TE	OGNIZANT ST DMS ERSONNEL	* BASI *PUBLICA *OR COMM	TIONS
CE C		SEENTDY C		T D 7	0117 11AND								.11050	,	_	1011110011/1101		0040
		ABILITY CH						DETERMINE ALL AMIC STATIC		URCE	*0.005 *0.4		*MSFC	/ *U		JOHNSON/MSI	-∗OMS-DK-	
40		ISTICS OF			TRI CONF	IG.		ITY CHARAC			*4.45					STREBY/NSI		
14FB		48 SCALE N					_	ICS OF SRB I		•	*		*IC WIND				*	13/1
		A RIGHT HA						CONFIGURA			*		*			MOSER JR.	*	
		INCH DIAME					*N		*		*		*		DMS	MOSEN ON	*	
]	ID ROCKET	BOOSTE	R			*		*		*		*	*			*	
	* ((MSFC MODE	EL 486)	*			*		*		*		*	*			*	
	* F	REENTRY CO	ONF I GUR	Δ*			*		*		*		*	*			*	
	1	TION AS DE	TERMIN	E			*		*		*		*	*			*	
		O FROM TES					*		*		*		*	*			*	
	*	HE NASA/MS	SFC 14-	I *			*		*		*		*	*			*	
		NCH TRISON	AIC MIN	D*			*		*		*		*	*			*	
	*1	TUNNEL		*			*		*		*		*	*			*	
	*			*			*		*		*		*	*		_	*	
								DETERMINE A		ORCE	*0.005		*MSFC	•		JOHNSON/MSF		
		ABILITY CH			ITRY CONF	IG.	-	MIC STATIC	_		*0.4		*MSFC	- *C			*VOLUME	
10	•	ISTICS OF						ITY CHARACT			*4.45			_		STREBY/NSI	*AUGUST,	1977
14FB		48 SCALE N						CS OF SRB			*		*IC WIND			-	*	
-151,0		A RIGHT HA						CONFIGURAT	IO*		*		*			MOSER JR.	* 1	
		INCH DIAME					*N		*		*	;	*	*-	DMS		*	
		ID ROCKET					-		*		*		∓ 	*			Ŧ	
		(MSFC MODE REENTRY CO					.		*		*		∓ 	*			*	
		TION AS DE					-		*		- -		~ ∸	*			÷	
) FROM TES					-		*		-	:	≁	*			-	
		HE NASA/MS					-		*		-		∓	*			•	
		NCH TRISON				•	-		-		*		<i>∓</i>	*			*	
		TUNNEL	ATO MIN	*			*		*		*	•	*	-			*	

			WIND TUNNEL TE	ST / DMS DAT	A PROCESSING			256
	*	* .	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST		* CONFIGURATIONS					* TEST DMS	
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	E* AGENCY	PERSONNEL	*OR COMMENTS
LARC	- *RESULTS FROM IN	VE*B58C5E18F4R5V5W8	7*TO INVESTIGAT	E TH*PRESSURE	*0.004 /	*LARC /	*JAMES C. ELLISO	DN/*DMS-DR-2311
CF4	- *STIGATIONS IN TH	HR*-VEHICLE 2A (MOD	I*E REAL GAS EF	FECT*	*5.94 ~	*LARC -	*LARC	*AUGUST, 1976
267-268	/*EE NASA/LARC HYF	PE*FIED)	*S USING A O.O	04 S*	*20.30	*FREON TUNNEL	*J. W. BALL	*
22HT	- *RSONIC WIND TUNN	VE*	*CALE MODEL OF	3 *	*	*22-INCH HELIU	M∗G. W. KLUG	*
446	/*LS ON A 0.004-S0	CA*	*THE SPACE SHU	TTLE*	*	*TUNNEL	*-DMS	*
LA78	*LE MODEL SPACE S	SH*	*ORBITER	*	*	*	*	*
LA87	*UTTLE ORBITER (M	*O	*	. *	*	*	*	*
LA88	*DEL 13P-0)TO DET	Γ *	*	*	*	*	*	*
CR-147,	620*ERMINE REAL GAS	E*	*	*	*	*	*	*
	FFECTS (LA78, LA	A8	*	*	*	*	*	*
	*7. LA88)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
AEDC	- *RESULTS OF AN IN	NV*VEHICLE 5, TO IN	IC*TO OBTAIN HEA	T TR*HEAT-TRA	NS*0.0175 /	*ROCKWELL/	∗W. H. DYE/RI	*DMS-DR-2312
SWTA	- *ESTIGATION OF TH	HE*LUDE SRB ALONE A	N*ANSFER DATA O	N TH*	* 3.0 -	*AEDC -	*K. W. NUTT/ARO	,IN∗VOLUME O1
J3A	/*SPACE SHUTTLE SO	O *D OTS (SPIKE NOS	E*E SPACE SHUTT	LE S*	* 4.0	*SUPERSONIC WI	N*C.	*JUNE, 1977
IH47	*LID ROCKET BOOS	TE*ET)	*OLID ROCKET B	OOST*	*	*D TUNNEL (A)	*D. A. SARVER	*
CR-151,	O75*R AERODYNAMIC H	EA*	*ER, BOTH ISOL	ATED*	*	*	*C. R. EDWARDS	*
	*TING CHARACTERIS		*AND IN THE PR	ESE *	*	*	*-DMS	*
	ICS OBTAINED US:	IN	*NCE OF THE OR	BITE*	*	*	*	*
	G THE 0.0175-SC	AL	*R AND EXTERNA	L TA*	*	*	*	*
	E MODEL 60-OTS	IN	*NK, DURING TH	E AS*	*	*	*	*
	*AEDC TUNNEL A DI	U *	*CENT PHASE OF	ITS*	*	*	*	*
	*RING TESTS IH47		*FLIGHT PROFIL		*	*	*	*
	*	*	*	*	*	*	*	*
AEDC	- *RESULTS OF AN II	NV+VEHICLE 5, TO IN	IC∗TO OBTAIN HEA	T TR*HEAT-TR	NS*0.0175 /	/ *ROCKWELL/	*W. H. DYE/RI	*DMS-DR-2312
SWTA		HE*LUDE SRB ALONE A			* 3.0 -	*AEDC -	*K. W. NUTT/ARO	.IN+VOLUME 02
AEU		O *D OTS (SPIKE NOS			* 4.0	*SUPERSONIC WI	N*C.	*JULY, 1977
IH47	*LID ROCKET BODS	TE*ET)	*OLID ROCKET B		*	*D TUNNEL (A)	*D. A. SARVER	*
CR-151	O76*R AE RODYNAMIC H	E A *	*ER. BOTH ISOL		*	*	*C. R. EDWARDS	*
	TING CHARACTERI	ST	*AND IN THE PR	ESE *	*	*	*-DMS	*
	O76*R AERODYNAMIC H *TING CHARACTERI *ICS DBTAINED US *G THE 0.0175-SC *E MODEL 60-OTS	[N*	*NCE OF THE OR		*	*	*	*
	G THE 0.0175-SC	AL	*R AND EXTERNA		*	*	*	*
	E MODEL 60-OTS	IN	*NK, DURING TH		*	*	*	*
	*AEDC TUNNEL A DI		*CENT PHASE OF	ITS*	*	*	*	*
	*RING TESTS IH47	*	*FLIGHT PROFIL	.E *	*	*	*	*
	*	*	*	*	*	*	*	*

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 -				WIND	TUNNEL	. TEST	/	DMS DATA	PROCES	SING						257
									*MODEL					COGNIZANT		SIC
TEST ID	* * REPORT TITLE	* CON	FIGURATIONS TESTED	*	TES PURPO	-	*	TYPE OF TEST		SCALE	_		*	TEST DMS PERSONNEL	*PUBL1	CATIONS
	*DECULTO OF MIND	T+ 0075	COAL E CD40		/CD154	THE T		TD46		_ ,	+4650	,	41471		ZUA +BUC F	D 0040
SC EDMT	- *RESULTS OF WIND - *UNNEL TESTS TO		_					LAI-IRAN	*5.2		*MSFC *ARC	_	*N/A	LIAM K. LOC	*VOLUN	
15	/*TERMINE HEAT TR		CC EXICKIVAL		USED I				*5.2			OT HYPE	•	RY CARROLL/		
114	*SFER RATES ON A				RATION				*					H. LINDAHL	*	.,
	041+0275 SCALE SPAC	-			RMAL EN		_		*		*NEL		*-DM		*	
, .	*SHUTTLE EXTERNA				FOR TH				*		*		*	-	*	
	*TANK WITH A 10				AND TO				*		*		*		*	
	*G/40 DEG DOUBLE				RATELY				*		*		*		*	
	ONE OGIVE NOSE	IN		*THE	RECOVE	RY FA	CT*		*		*		*		*	
	*THE NASA/ARC 3.	5 *		*ORS	FOR RE	DUCIN	G *		*		*		*		*	
	*HYPERSONIC TUNN	E *		*THE	HEAT T	RANSF	ER*		*		*		*		*	
	*L	*		*DAT	A FROM	FH13	*		*		*		*		*	
	*	*		*			*		*		*		*		*	
Ç	- *RESULTS OF WIND	T*.0275	SCALE SPACE	*TO \	/ERIFY	THE T	HE*F	IEAT-TRANS	5*.0275	5 /	*SFC	/	*WIL	LIAM K. LOC	KMA*DMS-D	R-2313
5HWT	- *UNNEL TESTS TO	DE*SHUTT	LE EXTERNAL	*ORE1	TICAL P	REDIC	TI*		*5.2	-	*ARC	-	*N/A	RC,	*VOLUN	IE 02
5	/*TERMINE HEAT TR	AN*TANK		*ONS	USED I	N THE	G*		*5.3					RY CARROLL/	MMA+MARCH	1, 1977
114	*SFER RATES ON A	. *		*ENEF	RATION	OF TH	E *		*		*SONIC	WIND TUN	1*R. 1	H. LINDAHL	*	
-151,0	042*0275 SCALE SPAC				RMAL EN				*		*NEL		* - DM	S	*	
	*SHUTTLE EXTERNA	_			FOR TH				*		*		*		*	
	*TANK WITH A 10				AND TO				*		*		*		*	
	*G/40 DEG DOUBLE	_			RATELY				*		*		*		* .	
	*ONE-OGIVE NOSE				RECOVE				*		*		*		*	
	*THE NASA/ARC 3.				FOR RE				*		*		*		*	
	*HYPERSONIC TUNN	E *			HEAT T		ER*		*		*		*		*	
	*L	*		*DA1	A FROM	FH13	*		*		*		*	•	*	
:C	- *RESULTS OF WIND	T+ 0075	CCALE EDACE	*******	/EDTEV	THE T		IEAT-TOANS	* ^^7	. ,	+650	,	+ 	LIAM K. LOC	VMA +DMC - D	10-2212
	- *UNNEL TESTS TO							ICA I - I KAIN.	*5.2		*ARC	,	*N/A		*VOLUM	
5	/*TERMINE HEAT TR		LE LATERIAL		USED I				*5.3			OT HYPER		RY CARROLL/		
14	*SFEF RATES ON A				RATION				*					H. LINDAHL	*	.,
	043+027: SCALE SPAC				RMAL EN		_		*		*NEL	W1110 101	*-DM		*	
,	*SHUTTLE EXTERNA				FOR TH				*		*		*	-	*	
	*TANK WITH A 10	_			AND TO				*		*		*		*	
	*G/40 DEG DOUBLE				RATELY				*		*		*		*	
	*ONE OGIVE NOSE				RECOVE				*		*		*		*	
	*THE NASA/ARC 3.				FOR RE				*		*		*		*	
	*HYPERSONIC TUNN				HEAT T				*		*		*		*	
	*L	*		*DAT	FROM	FH13	*		*		*		* .		*	
	•	*		*			*		*		*		*		*	

				WIND	TUNNEL TEST /	DMS DATA	PROCES	SING				258
	*	*		*	·	*	*MODEL	. -	*	*	COGNIZANT	* BASIC
TEST		*	CONFIGURATIONS	*	TEST	* TYPE OF			* TESTING	*	TEST DMS	*PUBLICATION:
ID	* REPORT TITL	.E *	TESTED	*	PURPOSE	* TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
	- *INVESTIGATION		ANDING	*DETE	RMINATION OF	*FORCE	*.0405	•	*ROCKWELL/		T. HUGHES/RI	
LSWT	- *SUPPORT SYSTE			*EFFE	ECTS OF VARIOU]*	*0.20		*NRLAD -		R. HOULIHAN	*FEB., 198
754	/*FECTS ON ORBI			_	INNEL MOUNT CO		*0.20		*LOW SPEED			*
DA176	*LOW SPEED AEC				GURATIONS ON 1		*		*TUNNEL	*-D	MS	*
CR-151,	406*AMIC CHARACTE				ORCE COEFFICE		*		*	*		*
	ICS USING O.	405-			S AND PRESSURE		*		*	*		*
	*SCALE MODEL 4	-		*S Of	N THE AFT TAIL	_*	*		*	*		*
	*IN THE NAAL L			*CONI	OF THE ORBI	*	*		*	*		*
	*PEED WIND TUN	INEL *		*TER	IN THE LANDIN	*	*		*	*		*
	* · · · · · · · · · · · · · · · · · · ·	*		*G CC	ONFIGURATION	*	*		*	*		*
	*	*		*		*	*		*	*		*
NRLAD	- *RESULTS OF AN	INV*O	.010-SCALE VL70-	-*TO (OBTAIN REYNOL	D*FORCE	* 0.0	10 /	*ROCKWELL/		C.MENNELL/RI	*DMS-DR-2315
7TWT	- *ESTIGATION OF	REY*0	OO14OC INTEGRATE	E*5 NI	JMBER EFFECTS	*	*0.6		*NRLAD -	*R.	H. LINDAHL	*AUGUST, 197
297	/*NOLDS NUMBER	EFFE*D	SPACE SHUTTLE I	_*ON (ORBITER ELEVO	/ *	*1.25		*7-FOOT TRI	SONI * - D	MS	*
IA141	*CTS ON INTEGR	RATED*A	UNCH VEHICLE	*HING	GE MOMENTS AN	*	*		*C WIND TUN	NEL *		*
CR-147,	623+VEHICLE ELEVO	*IH NC		*D W	ING BENDING/TO) *	*		*	*		*
	NGE MOMENTS A	ND W		*RSI	DNAL MOMENTS	*	*		*	*		* .
	ING PANEL LOA	NDS 0		*		*	*		*	*		*
	BTAINED WITH	0.01		*		*	*		*	*		*
	O-SCALE MODEL	. 72-		*		*	*		*	*		*
	OTS IN THE RO	CKWE		*		*	*		*	*		*
	*LL TRISONIC V	* DNI		*		*	*		*	*		*
	*TUNNEL	*		*		*	*		*	*		*
	*	*		*		*	*		*	*		*
ARC	- *RESULTS OF TE	ST I*F	ULL 331 INCH DIA	A+TO	EXAMINE THE F	E*FORCE	*0.07	/	*ROCKWELL/	∗D.	E. THORNTON/F	ROC*DMS-DR-2316
14-TWT	- *A137 IN THE !						*0.55	- '	*ARC -	*KW	ELL INTERNAT	ION*SEPT., 197
143-1			N 80% (264.8 IN				*1.15		*14-FOOT TE	RANSO*AL	•	*
IA137) OF FULL DIAME				*		*NIC WIND T	TUNNE *P.	K. MILLER/ RO	OCK*
CR-147.	622*0F THE 0.07				DS) FOR DETER		*		*L	*WE	LL INTERNATIO	NA*
			ICONIC NOSE PRO				*		*	*L		*
	*REBODY (MODE				AND SIDESLIP		*		*	_	A. SARVER	*
	*T) TO DETERM				ING BOOST FLI		*		*		W. KLUG	*
	*AUXILIARY AEF			*HT	50007 1 61	- *	*		*	*-D		*
												•
	AMIC DAIA >:	11-M *		*		*						
	*AMIC DATA SYS	SIEM *		*		*	*		*	*		*

259			ING	PROCESS	DMS DATA	Γ/	ND TUNNEL TEST	W1						
* BASIC	COGNIZANT	*	*	*MODEL		*		*		*			,	
*PUBLICATIONS	TEST DMS	TESTING *	CALE*	* 5	TYPE OF	*	TEST	IONS *	CONFIGURATIONS	*			т ,	TEST
*OR COMMENTS	PERSONNEL	AGENCY *	ANGE*	*MACH F	TEST	*	PURPOSE	*	TESTED	*	T TITLE	REPOR	,	ΙD
*DMS-DR-2317	W.H. DYE/RI	CKWELL/ +	/ *RC	*0.04	EAT-TRANS	cs *H	DETERMINE RC	83-0)*1	.04-SCALE (83-0	s *o.	OF TEST	RESULTS	- ;	C
	R. H. LINDAHL		*AR	*5.2 -					RBITER					5HW T
*	-DMS	FOOT HYPER*	*3.	*5.3		₹E *	IE ORBITER FOR	*1		ST*	NTROL SY	LION CO	/ ·	16
*		VIC WIND TUN*		*		* QO5	HE ORBITER FORI	*E		E*) NOZZLE	EM (RCS	,	153 ∧
*		_ *	*NE	* :		RA*	NAMIC HEATING I	* Y		RB*	ON THE O	FECTS	,787	!-151,
*		*	*	*		*	is .	*T		SC*	REBODY A	ITER FO		
*		*	*	*		*		. *			DDYNAMIC			
*		*	*	*		*		*		IN*	RATES US	EATING		
*		*	*	*		*		*			4-SCALE			
* ,		*	*	*		*		*			-O) IN T			
*		*	*	*		*		*		_	SEARCH C			
*		*	*	*		*		*			5 FOOT H			
*		*	*	*		*		*		NN*	WIND TU			
*		*	*	*		*		*		*	3A)	EL (OH5		
*		*	*	*		*		*		*			*	
	B. SPENCER, G.			*2.86					RBITER-140A/B/C					RC
*VOLUME 01	ARE/LARC			*4.60					26 C9 E43 F8 M1					WT
DEC., 1976		TARY PLAN W		*					28 R5 V8 W				-	73 75
*	D.B. WATSON		*11	*		MA*	SH SUPERSONIC I				0.015-5	-		75
*	-DMS	*	*	*		*	NUMBERS	*0			DTELY CO	-		14/,
- -		*	*	-		* *		* -			ELEVON) D SPACE			
T			* _	∓		.		*		-	RBITER T			
		*	*	-		-		-			THE NASA			
		∓	- -	-		-		.			DOT UPWT			
- -		*		-		-		.		*		EG 2)		
*		* •	•	- *		- -		-		*	(/ /	.LG 2)	- -	
M*DM2-DD-3340	3. SPENCER. G.	oc / 🕹	*LA	^ *2.86 -	OPCF.	1F *E	TERMINATION OF	/R/C=*r	RBITER-140A/B/C	S*NP	PERSONIC	ATGE SII	- 1	RC
*VOLUME 02	ARE/LARC	•	*LA	*4.60					26 C9 E43 F8 M1					WT
DEC., 1976		TARY PLAN W		*	,				28 R5 V8 W					73
*	D.B. WATSON			*	ĺ		SH SUPERSONIC N				0.015-5			75
*	-DMS		*	*		*	NUMBERS				DTELY CO			
*	U113	*	*	*		*	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*			ELEVON)		•	,
*		*	*	*		*		*		_	SPACE			
*		*	*	*		*		*			RBITER T			
*		*	*	*		*		*			THE NASA			
*		*	*	*		*		*			DOT UPWT			
*		*	*	*		*		*		*	(LA75)	.EG 2)		
		*		*						*		•		

•

	WIND TUNNEL TEST / DMS DATA	PROCESSING	260
* *	* *	*MODEL * * COGNIZANT *	BASIC
TEST * * CONFIGURATIONS	* TEST * TYPE OF	* SCALE* TESTING * TEST DMS *PUB	BLICATIONS
<pre>ID * REPORT TITLE * TESTED</pre>	* PURPOSE * TEST	*MACH RANGE* AGENCY * PERSONNEL *OR	COMMENTS

CALSPAN - *HEAT TRANSFER AND*.01-SCALE SPACE	CATO DETERMINE ACCEMUSATETRANS	S* .O1 / *ROCKWELL/ *P.R.CARROLL/RI, C*DMS	-00-0340
48HST - *PRESSURE TESTS O *HUTTLE ORB/ET 59		*7.5 ~ *CALSPAN - *.E. WITTLIFF/CALS*JUN	
IB9 /*N A O.O1-SCALE SP*OT	*TING RATES AND PR*	*20.0 *48-INCH HYPERS*PAN *	15/5
96HST - *ACE SHUTTLE MODEL*	*ESSURE DISTRIBUTI*	* *ONIC SHOCK TUN*D.W.HERSEY *	
IH43 *(59-OT) IN THE C *	*ONS ON AN UPDATED*	* *NEL *R. H. LINDAHL *	
CR-151,771*ALSPAN HYPERVELOC*	*CONFIGURATION (M *	* *96-INCH HYPERS*-DMS *	
ITY SHOCK TUNNELS	*CR 500) OF THE OR*	* *ONIC SHOCK TUN* *	
*(IH43) *	*BITER/EXTERNAL TA*	* *NEL * *	
*	*NK *	* * *	
* *	*	* * * *	
AEDC - *RESULTS OF TESTS *ORBITER 0.0125 7	O*TO OBTAIN INTERAC*FORCE	* O.O125 / *ROCKWELL/ *J.J. DAILEDA, J. *DMS	S-DR-2320
HWTB - *USING A 0.0125-SC*-OT	*TION EFFECTS OF T*	*5.9 - *AEDC - *MARROQUIN/RI *VOL	LUME 01
D8A /*ALE MODEL(70-01)0*	*HE RCS THRUSTER J*	*5.9 *HYPERSONIC WIN*R. H. LINDAHL *FEE	3., 1978
OA169 *F THE SPACE SHUTT*	*ET PLUMES ON SSV *	* *D TUNNEL (B) *J. E. VAUGHN *	
CR-151,390*LE VEHICLE ORBITE*	*AERODYNAMICS DURI*	* * *-DMS *	
R IN THE AEDC VKF	*NG RETURN-TO-LAUN*	* * * *	
*TUNNEL B (DA169) *	*CH-SITE(RTLS) ABO*	* * *	
*	*RT FLIGHT PHASE *	* * *	
* *	* *	* * * *	
AEDC - *RESULTS OF TESTS *ORBITER 0.0125 7	O*TO OBTAIN INTERAC*FORCE	* O.O125 / *ROCKWELL/ *J.J. DAILEDA, J. *DMS	S-DR-2320
HWTB - *USING A O.0125-SC*-OT	*TION EFFECTS OF T*		LUME O2
D8A /*ALE MODEL(70-DT)D*	*HE RCS THRUSTER J*		3., 1978
OA169 *F THE SPACE SHUTT*	*ET PLUMES ON SSV *	* *D TUNNEL (B) *J. E. VAUGHN *	
CR-151,391*LE VEHICLE ORBITE*	*AERODYNAMICS DURI*	* * *-DMS *	
R IN THE AEDC VKF	*NG RETURN-TO-LAUN*	* * *	
*TUNNEL B (0A169) *	*CH-SITE(RTLS) ABO*	* * *	
* *	*RT FLIGHT PHASE *	* * * *	
* *	* *	* * * * * * * * * * * * * * * * * * * *	
AEDC - *RESULTS OF TESTS *ORBITER 0.0125 7		* O.0125 / *ROCKWELL/ *J.J. DAILEDA, J. *DMS	
HWTB - *USING A 0.0125-SC*-OT	*TION EFFECTS OF T*		LUME 03
D8A /*ALE MODEL(70-OT)O*	*HE RCS THRUSTER J*		3., 1978
OA169 *F THE SPACE SHUTT*	*ET PLUMES ON SSV *	* *D TUNNEL (B) *J. E. VAUGHN *	
CR-151,392*LE VEHICLE ORBITE* *R IN THE AEDC VKF*	*AERODYNAMICS DURI*	* * *-DMS *	
R IN THE AEDC VKF *TUNNEL B (OA169) *	*NG RETURN-TO-LAUN*	* * * * * * * * * * * * * * * * * * *	
TIONNEL D (UA 103) *	*CH-SITE(RTLS) ABO* *RT FLIGHT PHASE *		
T	TREFEIGHT PHASE T	· · · · · · · · · · · · · · · · · · ·	
* *	"		

))				,
		·			: 			·
			WIND TUNNEL TEST	DMS DATA	PROCESSING			261
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* + REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCALI *MACH RANGI	E* TESTING E* AGENCY	* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
	*RESULTS OF TEST *HG9 OBTAINED IN		F*TO DETERMINE THE *INFLUENCE OF THER		S*0.040 / *8.0 -	*ROCKWELL/ *AEDC ~	*J. C. MARTINEZ + *W. H. DYE/RI	*DMS-DR-2321 *VOLUME 01
	/*HE AEDC VKF HYPE		*MAL PROTECTION TI		*8.0 *	*HYPERSONIC WIN	• • • •	*AUGUST, 1978
7418-E9A)H69	*SONIC TUNNEL B U		*LE ROUGHNESS ON V		*	*D TUNNEL (B)		*
	O*ING THE INFRARED		*INDWARD SURFACE E		*	**	*	*
K 131,41	*SCANNING METHOD		*OUNDARY-LAYER TRA		*	*	*	*
	*O OBTAIN HEAT TR		*NSITION.	*	*	*	*	*
	*NSFER DATA ON TH		*	*	*	*	*	*
	*O.040 SCALE MODE		*	*	*	*	*	*
	*L 82-0 OF THE SP		*	*	*	*	*	*
	CE SHUTTLE FOREB	0	*	*	*	*	*	*
	*DY	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
EDC -	*RESULTS OF TEST	O*ORBITER VEHICLE	F*TO DETERMINE THE	*HEAT-TRANS	5*0.040 /	*ROCKWELL/	*J. C. MARTINEZ +	*DMS-DR-2321
WTB -	*H69 OBTAINED IN	T+OREBODY	*INFLUENCE OF THEF	? *	*8.0 -	*AEDC -	*W. H. DYE/RI	*VOLUME O2
41B-E9A	/*HE AEDC VKF HYPE	R*	*MAL PROTECTION TI	*	*8.0	*HYPERSONIC WI	N∗J. E. VAUGHN	*AUGUST, 1978
169	*SONIC TUNNEL B U	S*	*LE ROUGHNESS ON W	/ *	*	*D TUNNEL (B)	*-DMS	*
R-151,41	1*ING THE INFRARED	*	*INDWARD SURFACE E	} *	*	*	*	* .
	SCANNING METHOD	T	*OUNDARY-LAYER TRA	*	*	*	*	*
	O OBTAIN HEAT TR	Δ	*NSITION.	*	*	*	*	*
	NSFER DATA ON TH	E	*	*	*	*	*	*
	+0.040 SCALE MODE		*	*	*	*	*	*
	*L 82-0 OF THE SP		*	*	*	*	*	*
	CE SHUTTLE FOREB	0 '	*	*	*	*	*	*
•	*DY	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
			3*TO RESOLVE DIFFER		*.18 0-	*ROCKWELL/	*R. C. MENNELL, A	
			*ENCES IN AIR DATA		*.25 1	*NRLAD -	*L. MENA, R. B. R	*NOV., 1981
	/*V VEHICLE 102 O.		*PROBE AND FLIGHT		*	*LOW SPEED WIND	-	*
228	*O SCALE FOREBODY		*TEST PROBE PRESS		*	*TUNNEL	*W. B. MEINDERS	*
- 160,84	7*MODEL NO. 57-0 I		*URE DATA OBTAINED		# 	*	*-DMS	#·
	*THE NAAL LOW SPE		*DURING WIND TUNN		∓	₹	±	*
	*ED WIND TUNNEL	*	*EL TESTS DA174 AN	I *	*	∓	*	.
	*		*D 0A224	→	→	₹	±	∓
	→	₹	*	~	*	*	7	Ŧ

					MIND	TUNNEL T	EST /	DMS DATA	PROCE	SSING				26
	*		*		*			·	*MODE	 L	*	*	COGNIZANT	* BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICATION:
DI.	*	REPORT TITLE	*	TESTED	* 	PURPOSE		TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMMENTS
LARC	_ *	RESULTS OF INVEST	*^	040-SCALE 72-01	- A E D	T-IMADE T	NIVECT	EODOE	+0.01	0 /	*ROCKWELL/	+14	E NICHOLDS	P.J*DMS-DR-2323
UPWT		IGATIONS CONDUCTE				TIONS ON	_		*1.55		*LARC -		-	T. *FEB 197
1152		D IN THE LARC 4-F	-			TED CONFI			*2.00		*UNITARY PLAN		•	•
IA94A	•	OOT UNITARY PLAN				-5 SPACE			*2.00		*IND TUNNEL		R/RI	*
		WIND TUNNEL LEG				FULL SIMU			*		*		C. FREEMAN/L	APC*
01. 701,		NO. 1 USING THE C				F UPDATED			*		*		H. LINDAHL	*
		.010-SCALE 72-0TS				PROTUBER			*		*	*-D		*
		MODEL OF THE SPA				ATTACH H			*		*	*	11113	*
		CE SHUTTLE INTEGR				WAS USED		•	*		*	*		*
		ATED VEHICLE	*		*	WAS OSED	,	•	*		*	*		*
	*	THE VEHILLE !	*		*				*		*	*		*
LARC	- *	RESULTS OF INVEST	*0	010-SCALE 72-0	L*VEDI	n-Inans t	NVFST	FORCE	* 0.0	10 /	*ROCKWELL/	* M	F NICHOLS P	.J.*DMS-DR-2324
UPWT		IGATIONS CONDUCTE	_			TIONS ON			*2.50	- •	*LARC -		WTHORNE.J.T.	
1177	_	D IN THE LARC 4-F				TED CONFI			*4.50		*UNITARY PLA			
1A94B		OOT UNITARY PLAN				-5 SPACE			*		*IND TUNNEL		R/RI	*
		WIND TUNNEL LEG				LAUNCH VE			*		*		C. FREEMAN/L	ARC*
		NO. 2 USING THE C				ULL SIMUL			*		*		H. LINDAHL	*
		.010-SCALE 72-0TS			-	UPDATED V			*		*	*-D		*
		MODEL OF THE SPA				PROTUBERA			*		*	*		*
		CE SHUTTLE INTEGR				ATTACH H			*		*	*		*
		ATED VEHICLE	*			WAS USED.		*	*		*	*		*
	*		*		*		,	*	*		*	*		*
MSFC	~ *	AERODYNAMIC CHARA	*C	DNF. 139	*T0	DETERMINE	THE .	*FORCE	*0.00	563 /	*MSFC /	*P.	E. RAMSEY/N	ASFC*DMS-DR-2325
14TWT		CTEFISTICS OF A C				RY STATIC	-		*0.6		*MSFC -		W. SPARKS	*NOV., 197
620		.00563 SCALE 142-				TY OF THE			*3.48		*14-INCH TRI			
SA14FA		INCH DIAMETER SOL	*		*		,	*	*		*IC WIND TUN	NEL * - D	OMS	*
CR-147.	645*	ID FOCKET BOOSTER	*		*		,	*	*		*	*		*
•	*	(MSFC MODEL 449	*		*			*	*		*	*		*
	*	AND 480) WITH SID	*		*		1	*	*	•	*	*		*
	*	E MOUNTED STINGS	*		*		,	*	*		*	*		*
	*	IN THE NASA/MSFC	*		*		:	*	*		*	*		*
	*	14 INCH TRISONIC	*		*			*	*		*	*		*
	*	WIND TUNNEL	*		*		1	*	*		*	*		*
	*		*		*			*	*		*	*		*

						WIND	TUNNEL TI	EST /	DMS DATA	PROCES	SSING					263
						*				*MODE!	 1	*	 *	COGNIZANT	* BASIC	·
TEST ID	*	REPORT	TITLE	*	CONFIGURATIONS TESTED	*	TEST PURPOSE		TYPE OF	*	SCALE RANGE		*	TEST DMS PERSONNEL	*PUBLICAT *OR COMME	TIONS
ARC	- +R	ESULTS (OF INVES	T+0	.010-SCALE 72-01	*AERO	-LOADS II	NVEST*	FORCE	*0.010	0 /	*ROCKWELL/	*M.	E.NICHOLS.P.J	. *DMS-DR-2	2326
ΓPT			CONDUCT				ION ON TI			*0.6	- •	*LARC -		WTHORNE, J.T.		
19			LARC 8-				D CONFIG			*1.20				LTON, P.K. MIL	LE*JAN.,	197
93			SONIC PR				SPACE SI			*		*IC PRESSURE			*	
7-151,			NNEL USI 010-SCAL				ULL SIMUI UPDATED			*		*NNEL		C. FREEMAN/LA H. LINDAHL	RC*	
			ODEL OF				PROTUBER			*		*	*ĸ. *-D		*	
			E SHUTTL				ATTACH H			*		*	*	MS	*	
			ED VEHIC				VERE USE		ť	*		*	*		*	
	*L		,	*		*		*	•	*		*	*		*	
	*			*		*		*	t	*		*	*		*	
RC	- *R	ESULTS (OF INVES	T*0	.010-SCALE 72-01	*AERO	-LOADS I	NVEST*	FORCE	*0.010	0 /	*ROCKWELL/	*M.	E.NICHOLS, P.J	. *DMS-DR-2	:326
PT ·			CONDUCT		MODEL		ION ON TH			*0.6		*LARC -		WTHORNE, J.T.		12
9			LARC 8-				D CONFIG			*1.20			-	LTON, P.K. MIL	LE*FEB.,	197
93			SONIC PR				SPACE SI			*		*IC PRESSURE			*	
-151,	-	_	NNEL USI				JLL SIMUI UPDATED			*		*NNEL		C. FREEMAN/LA H. LINDAHL	KC*	
			O1O-SCAL ODEL OF				PROTUBER			*		*	*ĸ. *-D		** •	
			E SHUTTL		•		ATTACH H			*		*	*	m3	*	
			ED VEHIC			_	VERE USE		•	*		*	*		*	
	+Ĺ			*		*		*	•	*		*	*		*	
	*			*		*		*	•	*		*	*		*	
C	- *R	ESULTS (DF TESTS	*C	ONFIG. 102 ORBIT	*TO 0!	STAIN IN	TERAC*	FORCE	*5.9	-	*ROCKWELL/	*L.	L. TRIMMER/A	RO*DMS-DR-2	327
TB.					R AND ET, DESIGN					*		*AEDC -	٠ل*	J. DAILERA,	J.*VOLUME O) 1
A					TED MODEL 70-OT					*				RROQUIN, H. S	. ∗JULY,	197
22			ACE SHUT			*LUME	S ON SSV	AERO*	t .	*		*D TUNNEL (B)		ESSER/RI	*	
-151,			LE ORBIT			*		*		*		*		E. VAUGHN	*	
		UNNEL B	AEDC VK	r *		*		7		*		*	*M. *-D	M. MOSER JR.	*	
	*	DINIACE D		*				-	•	*		*	*	14.3	*	
DC		ESULTS (OF TESTS	*C	ONFIG. 102 ORBIT	*TO 01	STAIN INT	FRAC*	FORCE	*5.9	-	*ROCKWELL/	*L	L. TRIMMER/A	RO*DMS-DR-2	327
TB					R AND ET, DESIGN					*		*AEDC -		J. DAILERA,		
\					TED MODEL 70-OT					*		*HYPERSONIC W				
22			ACE SHUT				S ON SSV			*		*D TUNNEL (B)	*DR	ESSER/RI	*	
- 151,			LE ORBIT	_		*		*	i	*		*	_	E. VAUGHN	*	
			AEDC VK	F*		*		*	•	*		*		M. MOSER JR.	*	
	+1	UNNEL B		*		*		*	L	*		*	*-D	MS	*	
	*			*		*		*		*		*	*		*	

TEST * * * * * * * * * * * * * * * * * * *	*VOLUME 03 *AUGUST, 1977 * * * *
AEDC	*OR COMMENTS *DMS-DR-2327 *VOLUME 03 *AUGUST, 1977 * * * * * * * * *DMS-DR-2328
AEDC - *RESULTS OF TESTS *CONFIG. 102 ORBIT*TO OBTAIN INTERAC*FORCE *5.9 - *ROCKWELL/ *L. L. TRIMMER/ARD* HWTB - *USING 0.0125-SCAL*ER AND ET, DESIGN*TION EFFECTS. OF R* * *AEDC - *J. J. DAILERA, J.* D9A	*DMS-DR-2327 *VOLUME 03 *AUGUST, 1977 * * * * * * * * * * * *DMS-DR-2328
HWTB	*VOLUME 03 *AUGUST, 1977 * * * * * * * * * * *
HWTB	*VOLUME 03 *AUGUST, 1977 * * * * * * * * * * *
D9A	*AUGUST, 1977 * * * * * * * *
IA22 *F THE SPACE SHUTT*	* * * * * * *DMS-DR-2328
CR-151.081*LE VEHICLE ORBITE*	
R IN THE AEDC VKF	
*TUNNEL B	
*	
LARC - *EFFECT OF A SURFA*REUSABLE SURFACE *TO DETERMINE EFFE*HEAT-TRANS*1.0 / *LARC / *D. A. THROCKMORTO* CFHT - *CE-TO-GAP TEMPERA*INSULATION TILE G*CT OF A SURFACE-T* *10.3 - *LARC - *N/LARC / *D. A. THROCKMORTO* 105 /*TURE DISCONTINUIT*APS	
CFHT - *CE-TO-GAP TEMPERA*INSULATION TILE G*CT OF A SURFACE-T*	
105	*
LA34 *Y ON THE HEAT TRA*	*
TND-8233 *NSFER TO REUSABLE* *N THE HEAT TRANSF* * *UNNEL *-DMS *SURFACE INSULATI * *ER WITHIN SPACE S* * * * *ON TILE GAPS * *HUTTLE, RSI, TILE* * * * * * *GAPS SUBMERGED I * * * * * * *N A THICK TURBULE* * * * * * *NT BOUNDARY LAYER* * * ** LARC - *CALBIRATION RESUL*SSV ORBITER (MODE*TO PROVIDE CALIBR*FORCE *O.4 - *ROCKWELL/ *V. ESPARZA, 16TT - *TS OF THE BASELIN*L 57-0) FOREBODY *ATION OF THE AIR * * *1.30 *LARC - * D.E. THORN 312 /*E AIR DATA PROBES*W/ ADP, FTP, AND *DATA PROBES * * *16-FOOT TRANSO*TON/ROCKWELL CR-160.837*6-FOOT TRANSONIC * * * ** ** ** ** ** ** ** **	
*SURFACE INSULATI *	*
*ON TILE GAPS * *HUTTLE, RSI, TILE* * * * * * * * * * * * * * * * * * *	*
*	*
* * * * * * * * * * * * * * * * * * *	*
* * * * * * * * * * * * * * * * * * *	*
16TT - *TS OF THE BASELIN*L 57-0) FOREBODY *ATION OF THE AIR *	*
16TT - *TS OF THE BASELIN*L 57-0) FOREBODY *ATION OF THE AIR *	*
312 /*E AIR DATA PROBES*W/ ADP, FTP, AND *DATA PROBES * * * * *16-FOOT TRANSO*TON/ROCKWELL OA224 *AT THE LANGLEY 1 *ADP AND FTP * * * * * * * * * * * * * * * * * * *	*DMS-DR-2329
OA224 *AT THE LANGLEY 1 *ADP AND FTP *	*AUGUST, 198
CR-160.837*6-FOOT TRANSONIC * * * * * * *L	*
	*
AUTAID THRUSE LICENIA.	*
WIND TUNNEL USING * * * * * * * * R. HOULIHAN	*
*A O.10 SCALE ORB *	*
ITER_FOREBODY_MOD	*
EL 102 LINES (0A2	*
*24)	*
** * * * * * * * * * * * * * * * * * *	*
AEDC - *RESULTS OF A FLOW*CONF. 4, MODEL 29*TO SIMULATE ATMOS*HEAT-TRANS*O.0175 / *ROCKWELL/ *B. J. HERRERA/RI	
HWTB - *FIELD SURVEY CON *-O *PHERIC ENTRY BY I* *7.82 - *AEDC - *L. D. CARTER, W. 524 /*DUCTED USING THE * *NVESTIGATING SHOC* * *HYPERSONIC WIN*R. MARTINDALE. C.	
	•
OH52 *0.0175 SCALE O BI* *K AND BOUNDARY LA* * *D TUNNEL (B) *E. KAUL/ARO CR-147.637*TER MODEL 29-0 IN* *YERS ON LOWER ORB* * * * *M. M. MOSER JR.	•
*THE AEDC VKF T JN * *ITER SURFACE * * * *	*
NEL B DURING T :ST	*
**************************************	*
* * * * *	*

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			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			265
+	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS	* TEST	* TYPE OF	* SCAL	E* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	E* AGENCY	* PERSONNEL	*OR COMMENTS
		*						
ARC -	- *STATIC STABILITY	/ *SRB-WITH HEAT SH	*TO DETERMINE THE	*FORCE	*0.028 /	*MSFC /	*W.F.BRADDOCK, G.	D*DMS-DR-2331
11,97,87-	- *AND PRESSURE DAT	TA*ELD(SOLID)	*AERODYNAMIC STAB	I*PRESSURE	*1.96 -	*ARC -	*.STREBY/NORTHROP	*VOLUME 01
074-1	/*FROM WIND TUNNEL	- *SRB-W/O HEAT SHI	E*LITY CHARACTERIS	T *	*3.48	*11-F00T, 9-F0	O*SERVICES	*OCT., 1981
11TWT -	- *TESTS OF A .028	- *LD	*ICS AND PRESSURE	*	*	*T, 8-FOOT, UN	I*J.D.JOHNSON/NASA	\-*
SA11F	*SCALE (MSFC MODE	EL*SRB-WITH HEAT SH	*DISTRIBUTION OF	T*	*	*TARY WIND TUN	N*MFSC	*
CR-160,83	38*483) SPACE SHUTT	*ILD (FLEXIBLE)	*HE SRB RENTRY CO	N*	*	*EL	∗J. E. VAUGHN	*
	*LE SRB AT REENTS		*FIGURATION	*	*	*11-FOOT TRANS	D*G. W. KLUG	*
	*ATTITUDES IN THE	*	*	*	*	*NIC WIND TUNN	E*-DMS	*
	*NASA/ARC UNITARY	/ *	*	*	*	*L (UNITARY)	*	*
	PLAN WIND TUNNEL	_S	*	*	*	*	*	*
	*(SA11F)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
ARC -	- *STATIC STABILITY	/ *SRB-WITH HEAT SH	I*TO DETERMINE THE	*FORCE	*0.028 /	*MSFC /	*W.F.BRADDOCK, G.	D*DMS-DR-2331
11.97.87-	*AND PRESSURE DAT	TA*ELD(SOLID)	*AERODYNAMIC STAB	I*PRESSURE	*1.96 -		*.STREBY/NORTHROP	
074-1	/*FROM WIND TUNNEL	. *SRB-W/O HEAT SHI	*LITY CHARACTERIS	T*	*3.48	*11-F00T, 9-F0	O*SERVICES	*OCT., 1981
11TWT -	*TESTS OF A .028-	- *LD	*ICS AND PRESSURE	*	*	*T. 8-FOOT, UN	I*J.D.JOHNSON/NASA	·-*
SA11F	*SCALE (MSFC MODE	L*SRB-WITH HEAT SH	*DISTRIBUTION OF	T *	*	*TARY WIND TUN		*
CR-160.83	39*483) SPACE SHUTT	*ILD (FLEXIBLE)	*HE SRB RENTRY CO	N*	*	*EL	*J. E. VAUGHN	*
	*LE SRB AT REENTE		*FIGURATION	*	*	*11-FOOT TRANS		*
	*ATTITUDES IN THE	*	*	*	*	*NIC WIND TUNN	E*-DMS	*
	*NASA/ARC UNITARY	/ *	*	*	*	*L (UNITARY)	*	*
	*PLAN WIND TUNNEL		*	*	*	*	*	*
	*(SA11F)	*	*	*	*	*	*	*
•	*	*	*	*	*	*	*	*
ARC -	- *RESULTS OF AEROD	Y*ORBITER- TAILCON	*TO FORM A PRE-LA	U*FORCE	*0.03 /	*ROCKWELL/	*R.L.GILLINS/ROCK	W*DMS-DR-2332
		M*OFF, TAILCONE ON			*0.3 -	*ARC -	*ELL	*OCT., 1977
	/*DMENT TESTS OF C		*DATA BASE FOR PL		*0.6	*14-FOOT TRANS	D+V.ESPARZA/ROCKWE	
CA13		(*ORBITER- TAILCON			*	*NIC WIND TUNN		*
		5-*DN, TC23, STING			*	*L	*D. A. SARVER	*
	*O) OF THE SPACE		*ER ALT CONFIGURA		*	*	*G. W. KLUG	*
	*HUTTLE ORBITER A		*ION.	*	*	*	*-DMS	*
		*747/1 + \$1-12 (SI		*	*	*	*	*
		*EED BRAKE DEPLOY		*	*	*	*	*
	*TRANSONIC WIND T		*	*	*	*	*	*
	*NNEL (CA13)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*

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			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			266
	*	*	*	*	*MODEL	* .	* COGNIZANT	* BASIC
TEST			* TEST				* TEST DMS	
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG	E* AGENCY	* PERSONNEL	*OR COMMENTS
ARC	- *WIND TUNNEL TE	ST *O1+TC23'ALT' CON	F*VERIFY ALT VEHI	CL*FORCE	*0.030 /	*ROCKWELL/	*T.J.DZIUBALA/RI	*DMS-DR-2333
11TWT		.03*IGURATION WITH T			*0.4 -		*R.R.BURROWS/RI	*VOLUME 01
187-1	/*O-SCALE SSV OR		*ONTROL CHARACTE		*1.2	*11-FOOT TRAN	ISD*M. M. MANN	*NOV., 1977
OA 175) *01+TC23+G19 'ALT			*	*NIC WIND TUN	NE * - DMS	*
CR-151		-FO*WITH LANDING GEA			*	*L (UNITARY)	*	*
	*OT LEG OF THE		*E ELEVON. RUDDE		*	*	*	* .
	*A/ARC UNITARY	PLA*01 'ALT' WITHOUT	*SPEEDBRAKE, AND	B*	*	*	*	*
	*N WIND TUNNEL		*ODY FLAP HINGE		*	*	* *	*
	* 175)	*01 = AT132 - PR1	*MOMENTS WITH SE	AL*	*	*	*	*
	*	*'102' REENTRY CO	N*ED HINGELINES.	EF*	*	*	*	*
	*	*FIGURATION	*FECTS OF RN/L A	ND*	*	*	*	*
	*	*	*DEPLOYED LANDING	G *	*	*	*	*
	*	*	*GEAR/DOORS ON V	EH*	*	*	*	*
	*	*	*ICLE STABILITY	AN*	*	*	*	*
	*	*	*D CONTROL. TAIL	CO*	*	*	*	*
	*	*	*NE PRESSURES	*	*	*	*	*
	*	*	*	*	*	*	*	*
ARC	- *WIND TUNNEL TE	ST *O1+TC23'ALT' CON	IF*VERIFY ALT VEHI	CL*FORCE	*0.030 /	*ROCKWELL/	*T.J.DZIUBALA/RI	
11TWT	- *OA175 OF THE O	.03*IGURATION WITH T	A*E STABILITY AND	C*PRESSURE	*0.4 -	*ARC -		
187-1	/+O-SCALE SSV OR	3IT*ILCONE	*ONTROL CHARACTE	RI*	*1.2	*11-FOOT TRAN	NSO+M. M. MANN	*DEC., 1977
OA 175	*ER MODEL (47-0) *01+TC23+G19 'ALT	"*STICS WITH TAIL	- *	*	*NIC WIND TU	NNE * - DMS	*
CR-151.	375*IN THE 11 X 11	-FO*WITH LANDING GEA	A *CONE ON. DETERM	IN*	*	*L (UNITARY)	*	*
	*OT LEG OF THE	NAS*R DEPLOYED	*E ELEVON, RUDDE	R/*	*	*	*	*
		PLA*01 'ALT' WITHOUT			*	*	*	*
	*N WIND TUNNEL	(DA*TAILCONE	*ODY FLAP HINGE	*	*	*	*	. *
	*175)	*01 = AT132 - PR1	* *MOMENTS WITH SE	AL*	*	*	*	*
	*	*'102' REENTRY CO	N*ED HINGELINES.	EF*	*	*	*	*
	*	*FIGURATION	*FECTS OF RN/L A	ND*	*	*	*	*
	*	*	*DEPLOYED LANDIN		*	*	*	*
	*	*	*GEAR/DOORS ON V		*	*	*	*
	*	*	*ICLE STABILITY	AN*	*	*	*	*
	*	*	*D CONTROL. TAIL	CD*	*	*	*	*
	*	*	*NE PRESSURES	*	*	*	*	*
	*	*	*	*	*	*	*	*

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							WIND	TUNNEL TEST	/	DMS DATA	PROCES	SSING						267
		*			*		*		*		*MODEI	 L	*		*	COGNIZANT	* BASIC	:
TES		*			*	CONFIGURATIONS	*	TEST		TYPE OF			* TEST			TEST DMS	*PUBLICAT	IONS
ID		*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGEN	CY	*	PERSONNEL	*OR COMME	NTS
ARC						1+TC23'ALT' CON	_				*0.030			•		J.DZIUBALA/RI		
11TWT						GURATION WITH TA	-						*ARC_			R.BURROWS/RI		
187-1			SCALE S					ROL CHARACTE			*1.2					M. MANN	*DEC.,	1977
OA 175						1+TC23+G19 'ALT					*		*NIC WI			MS	*	
CR-151						ITH LANDING GEA					*		*L (UNI	TARY)	*		*	
						DEPLOYED					*		*		*		*	
						1 'ALT' WITHOUT		•			*		*		*		*	
				INNEL (AILCONE		FLAP HINGE			*		*		*		*	
		* 17	(5)			11 = AT132 - PR1					*		*		*		*	
		*				102' REENTRY CO					*		*		*		*	
		*			*F	IGURATION	_	TS OF RN/L A			*		*		*		*	
		*			*			LOYED LANDING			*		*		*		*	
		*			*			R/DOORS ON VI			*		*		*		*	
		*			*			E STABILITY A			*		*		*		*	
		*			*			ONTROL. TAIL	CO*		*		*		*		* -	
		*			*		*NE	PRESSURES	*		*		*		*		*	
		*			*		*		*		*		*		*		*	
AEDC						EENTRY CONFIG. 1					*0.009		*MSFC	/	*P.	E. RAMSEY/MSF	C*DMS-DR-2	334
PWT4T						TH ALL MAJOR PRO			IT*		*0.4	-	*AEDC	-	*۷ .	W. SPARKS	*NOV.,	1976
E3A	/	*C	CHARACT	ERISTI	CS*T	UBERANCES	*Y 0	F SRB	*		*1.2		*TRANSO	NIC PRO	P*-D	MS	*	
SA16F		*0F	A 0.00	548 SC.	A *		*		*		*		*ULSION	WIND T	U*		*	
CR-147	648	*LE	MODEL	(MODEL	N*		*		*		*		*NNEL (PWT-4T)	*		*	
		0.	486) 0	F THE	SP		*		*		*		*		*		*	
		*AC	E SHUTT	LE 146	- I *		*		*		*		*		*		*	
		NO	H DIAME	TER SO	LI		*		*	•	*		*		*		*	
		*D	ROCKET	BOOSTE	R *		*		*		*		*		*		*	
		A1	ANGLES	OF AT	TA		*		*		*		*		*		*	
		CH	FROM 1	13 TO	18		*		*		*		*		*		*	
		*0	DEGREES	IN TH	E *	•	*		*		*		*		*		*	
		AE	DC PWT	4-F00T	T		*		*		*		*		*		*	
		RA	NSONIC	WIND TI	UN		*		*		*		*		*		*	
		*NE	L		*		*		*		*		*		*		*	
		*			*		*		*		*		*		*		*	

										•								
										•								
							WIND	TUNNEL '	TEST /	DMS DAT	A PROCES	SING						268
		•									+40051							
TEST	•	*		*	CONF	IGURATIONS	*	TEST		* * TYPE O	*MODEL	SCALE	* * TESTI	NG	*	COGNIZANT TEST DMS	* BAS: *PUBLIC	
ID		* REPOR	RT TITLE	*		TESTED	*	PURPOSI	E	* TEST		RANGE			*	PERSONNEL	*OR COM	
ISFC	_	*DEC111 TO	S OF EXPER	T +1/E	urci:	c =	*TUE	PURPOSE	OF TU	*E000E	*0.004	. ,	*ROCKWEL	. ,	4E C	. ALLEN/ROCK	WE *DME - DD	- 1225
14TWT			INVESTIGA	-				EST WAS			*0.60	•	*MSFC	-	*E.U	. ALLEN/RUCK	*DEC.,	-2335 1979
641			N THE MSFC		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	74 013		INFORM			*3.48			TRISON		E. VAUGHN	*	1373
646			DETERMINE					TING/BO			*		*IC WIND				*	
IA140A			S OF A MUL					RENCE,			*		*		*-DM		* 1	
CR-151	783	3*IPLE S	TING SUPPO	R*			*STIN	G ASSEM	BLY D	*	*		*		*		*	
			EM ON THE				*ESIG	N, DETE	RMINE	*	*		*		*		*	
			EHICLE AER	_				CT OF V			*		*		*		*	
			CS UTILIZI					PARATIO			*		*		*		*	
			OO4 SCALE	•				CHARACT			*		*		*		*	
			, 77-0) SH					F ET PLI			*		*		*		*	
			EHICLE 5 (1*				ORBITER			*		*		*		*	
		*A140 A	/6)	*			-	CTS OF I LEVON H	-		*		*		*		*	
		*		*			*OMEN		INGE M	*	*		*		*		*	
		*		*			*	13		*	*		*		*		*	
LARC	_	*INVEST	IGATION OF	*1.4	ARC .	0098-SCALE	*TO 0	RTAIN O	RRITER	*FORCE	* 1.	5 <i>-</i>	*LARC	/	*G	WARE/LARC	*DMS-DR	-2336
UPWT			GH ANGLE C					CHARAC			* 4.		*LARC	_		SPENCER, JR/L	-	1983
1345			AERODYNAM					AT ANG			*		*UNITARY	PLAN W			*	
1390	,	/+ICS CF	A SPACE S	H*				CK FROM			*		*IND TUN	INE L	*J.	E. VAUGHN	*	
-A145		*UTTLE (ORBITER(LA	R*			* 0 60	DEGREE	S	*	*		*		*B.	J. BURST	*	
CR-167	37	5 *C .O (9)	8 SCALE MO	D*			*			*	*		*		*-DM	S	*	
		-	THE LARC				*			*	*		*		*		*	
			MACH NUME				*			*	*		*		*		*	
			M 1.5 TO 4	. *			*			*	*		*		*		*	
		*5(LA14!	5)	*			*			*	*		*		*		*	
IDI AD	_	# MEDI	FICATION S	*	TOUT	TECT DECE	* 	EDIEV T		***************************************	* 40.40	-	**************************************	1./	*	C LEEEVDE /D	# DMC-DD	- 0007
NRLAD LSWT			THREE AME			TEST PROB		TION DA			*0.18		*ROCKWEL *NRLAD	.L/ -		G. LEFEVRE/R .HERSEY	*DEC.,	
759			CH CENTER		ALIDK	A I TON		D USING			*0.26	_	*NKLAD *LOW SPE				*DEC.,	13/2
DA236	•		STATIC PRO					RESEARC			*		*TUNNEL	.LD WINL	*-DM		*	
	780		THE ROCKWE					ROBES	OLINI	*	*		*		*		*	
			RNATIONAL				*			*	*		*		*		*	
			W SPEED WI				*			*	*		*		*		*	
		*D TUNN		*			*			*	*		*		*		*	
		*		*			*			*	*		*		*		*	

))
						WIND	TUNNEL TE	EST /	DMS DATA	PROCES	SSING					269
	*			*		*		*		*MODEL	L ,		*	COGNIZANT	* BAS	SIC
TEST ID	*	REPORT	****	*	CONFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF TEST		SCALE:		*	TEST DMS	*PUBLIC	
		KEPUKI	1116		162160		PURPUSE		1651	*MACH	RANGE	* AGENCY		PERSONNEL	*OR COM	MEN 15
			05 THE		V.000D 0 00DITE						. ,					
W SWT					X1322D-3,ORBITE ODEL 8-0		IFFET PROE		STRUCT-DY	N*U.U46		*BOEING / *UW -		L. GILLENS/RI A. SARVER	*DMS-DR	1976
170		C BLFFE			ODLE O O		JLTING FRO			*				M. MOSER JR.	*	1570
53 .		TH A 0.0		-			ER WAKE			*		*TUNNEL	*-D1		*	
		MODEL (7			•		RISTICS W			*		*	*	,,	*	
, .		0-3/ORBI					ONE OFF.			*	*	k	*		*	
		OF THE 7		-			DE DESIGN			*	*		*		*	
		SITER IN	-				ND ACCELE			*	×	K	*		*	
		RSITY O					NVIRONMEN			*	*	*	*		*	
		TON WIND					EVELOP BU	- •		*	*	*	*		*	
	*			*			ITIVITY O			*	×	×	*		*	
	*			*			ARIOUS A			*	*		*		*	
	*			*		*		*i		*	*	×	*		*	
DC	- *1	RESULTS	OF TEST	S +0	.0175-SCALE THI	V*1)SE	ANWISE HE	ATTN+F	IFAT-TRAN	5*0.017	75 / 4	ROCKWELL/	*C.1	. BERTHOLD, J	*DMS-DR	2-2340
VTB					SKIN THERMOCOUP					*7.90	•	AEDC -		ROQUIN/RI	*VOLUME	
7A					SHUTTLE ORBITE					*8.00		HYPERSONI			*SEPT.,	
198	•	THE SPAC					AT BAND F			*		D TUNNEL		R. LUTZ	*	
₹-160.5	01+0	DRBI ER	TO DETE	R *		*BERA	NCES AND	LH2 *		*	*	¥	*-DN		*	
	-	AINE RE-					ING LINES			*	*	*	*	=	*	
		CONVEC					NOZZLE F			*	*		*		*	
	*	TRANSFER	RATES	0 *			AND 3)UPD			*	×	¥	*		*	
		THE UP					N NOZZLE			*	*	k .	*		*	
	*	SURFACE	AND SSM	E *			WITH BODY			*	×	k .	*		*	
	!	OZZLES	IN THE	AE		*P AN	D ELEVON	DEFL*		*	*	×	*		*	
		C VKF '				*ECTI		*		*	*	k	*		*	
	*(NIC WIN	D TUNNE	L *		*		*		*	*	*	*		*	
	*	(OH98)		*		*		*		*	*		*		*	
	*			*		*		*		*	y.	k	*		*	

			WIND TU	NEL TEST / DMS	DATA PROCESS	ING		270
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST						CALE* TESTING	* TEST DMS	
ID	* REPORT TI	TLE * T	ESTED * PL	JRPOSE * 1	TEST *MACH R	ANGE* AGENCY	* PERSONNEL	*OR COMMENTS
AEDC			SCALE THIN+1)SPAN					, J.*DMS-DR-2340
HWTB			HERMOCOUPL*G ON U		*7.90 -		*MARROQUIN/RI	*VOLUME 02
J7A		-	LE ORBITER*URFACE		*8.00		WIN*D.W.HERSEY	*SEPT., 1980
OH98	*THE SPACE S			BAND PROTU*	*	*D TUNNEL (3) *G. R. LUTZ	*
CR-160,	502*ORBITER TO			S AND LH2 *	*	*	* -DMS	*
	*MINE RE-ENT			G LINES ON *	*	*	*	*
	E CONVECTIV			DZZLE HEATI	* .	*	*	*
	*TRANSFER RA			3)UPDATE *	*	*	# 	*
	N THE UPPER			NOZZLE HEAT	*	*	# 	*
	SURFACE AND			TH BODY FLA	*	*	*	*
	NOZZLES IN			ELEVON DEFL	*	*	*	*
	*DC VKF 'B'		*ECTION	\$ *	*	*	*	*
	*ONIC WIND T	UNNEL *	*	*	*	*	*	*
	*(OH98)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
TBCA	- *RESULTS OF			AIN DYNAMI*STR		/ *BOEING /		W. *DMS-DR-2341
BTWT	- *CS4 AND CS5			S, PRESSURE*	*0.15 -		*D. BURGGRAF,	
	193/+VESTIGATE D			NNAGE FLOW *	*0.70		WIND*. COVINGTON/T	RC *
CS4/5	*LOADS AND P		*FIELD	DATA *	*	*TUNNEL	*D. A. SARVER	*
CR-147,	638*RES ON 0.03		*	*	*	*	*M. M. MOSER J	K. *
	*MODELS (AX1		*	*	*	*	*-DMS	
	*/4 AND 45-0		*	*	*	*	*	* *
	*ATED 747 CA		*	*	*			<u>.</u>
	*SPACE SHUTT		*	*	*	*	*	*
	*ITER IN THE		*	*	*	*		
	*G TRANSONIC	MILID *	*	*	*	*	*	•
	*TUNNEL	*		*	*	*		•
4500	*	BUACE +MODEL C	*	*	* T TDANC+0 040	* ************************************	* *W. H. DYE/RI	* *DMC-DD-0240
AEDC HWTB			32-0. 50% F*TO INV		*8 -	/ *ROCKWELL/ *AEDC ~	*W. H. DTE/KI *L. L. TRIMMER	*DMS-DR-2342 */ARD*JUNE: 1977
	- *CHANGE PAIN			ROUGHNESS E*	*8 -		WIN*M. M. MOSER J	
82A 0H54B	/*TRANSFER TE	_		ON BOUNDAR*	*			·K. *
	ILIZING 0.0			R TRANSITIO	*	*D TUNNEL (B) *~UMS	
CK-191,	O74*LE 50 PERCE		*N	*	*	# *	*	*
	*EBODY MODEL *82-0) OF TH		∓	*	*	# *		
			*	*	*		.	.
	*KWELL INTER		*	*	* *	∓	*	.
	*AL SPACE SH		∓	*	# _	# _	*	*
	*ORBITER IN		∓	*	# _	*	* *	-
	DC VKF HYPE	K20NIC	*	*	∓	Ŧ 	* *	* *
	*TUNNEL B	*	*	*	*	*	*	* ·
	₹	*	*	*	₩	*	*	₹

#HT - *RVEYS ON THE LEEW*		,)))
TEST																	ŕ
TEST								UD TUNNEL TE		DMC DATA		CTNC					074
TEST * CONFIGURATIONS * TEST * TYPE OF * SCALE* TESTING * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST DMS * TEST DMS * TEST DMS * TEST DMS * TEST DMS * TEST DMS * PUBLICATIONS * TEST DMS * TEST								ND TONNEL TE) / 	UMS DATA	PRUCES	51NG					2/1
22HT - *RVEYS ON THE LEEW*			* * * REPO	RT TITLE	* * (* * *		*	SCALE*		* * *	TEST DMS	*PUBLICA	TIONS
22HT - *RVEYS ON THE LEEW*							. =.										
### ARD SURFACE OF A *						ORBITER						-				-	
LAB5																*DEC.,	1981
*** **********************************		•									*20.0					*	
ITER AT 30 DEGREE **O DEGREES ANGLE O* ** ** ** ** ** ** ** ** ** ** ** **											*	*	OMILL			*	
\$ ANGLE OF ATTACK	,										*	*	İ	*		*	
*AND MACH 20 IN T *									*		*	*	:	*		*	
HE LARC 22 INCH H *ELIUM TUNNEL(LAB5* * * *ELIUM TUNNEL(LAB5* * * * * * * * * * * * *							*		*		*	*		*		*	
*)							*		*		*	*	!	*	•	*	
*)		:	*ELIUM	TUNNEL(LA	185 *		*		*		*	*	ř	*		*	
11TWT - *TY AND CONTROL CH*826 C9 E43 F8 M16*IC AERODYNAMIC DA*					*		*		*		*	*	:	*		*	
11TWT - *TY AND CONTROL CH*B26 C9 E43 F8 M16*IC AERODYNAMIC DA*			*	•	*		*		*		*	*	:	*		*	
ARACTERISTICS OF *N28 R5 V8 W	RC	- :	*TRANSO	NIC STABI	LI *ORE	BITER-140A	/B/C=*T6	OBTAIN TRAM	SON*	FORCE	*0.015	/ *	LARC /	*J.	GAMBLE, J.	UND*DMS-DR-	2344
## A O.015-SCALE (RE*	1TWT	- :	*TY AND	CONTROL	CH*B26	6 C9 E43 F	8 M16*I	C AERODYNAMIC	DA*		*0.6	- *	ARC -	*ER	WOOD/JSC	*VOLUME	01
**R-151,788*MOTELY CONTROLLED* **D SENSITIVITY TO *		/ :	*ARACTE	RISTICS (OF *N28	3 R5 V8 W	*T	A ON CONTROL	SUR*		* 1.2	*	11-FOOT TR	ANSO*HA	RRY PARRELL/	RI *JAN.,	1980
*ELEVON) MODEL 44 *	477	,	*A 0.01	5-SCALE ((RE*		*F/	ACE LINEARITY	/ AN*		*	*	NIC WIND T	UNNE*J.	W. BALL	*	
-O OF THE SPACE S	₹-151,										*	*	L (UNITARY) *C.	R. EDWARDS	*	
HUTTLE ORBITER TE											*	*		*-D	MS	*	
STED IN THE NASA/											*	*		*		*	
ARC 11-FOOT TRANS											*	*		*		*	
*ONIC WIND TUNNEL *					•						*	*		*		*	
*(LA77)											*	*		*		*	
					L *						*	*		*		*	
*		,	*(LA77)		*						*	*		*		*	
AP DEM COTTONS		,	*		*						*	*		*		*	
* * *CE DEVLECTIONS * * * * *		,	*		*		*C1	E DEVLECTIONS	*		*	*		*		*	

	. .					WIND	TUNNEL TE	ST /	DMS DATA	PROCES	SING					27:
TEST ID	*	REPORT	TITLE	* *	CONFIGURATIONS TESTED	* *	TEST PURPOSE	* *	TYPE OF TEST		SCALE	* * TESTING * AGENCY	* * *	COGNIZANT TEST DMS PERSONNEL	* BASI *PUBLICA	ATION:
			,													
RC 1TWT					RBITER-140A/B/C				-DRCE	*0.015		*LARC /		GAMBLE, J. UN		
11WI 00-1					26 C9 E43 F8 M1					*0.6		*ARC -		OOD/JSC	*VOLUME	-
30- 1 377	•				28 R5 V8 W		ON CONTROL			* 1.2		*11-FOOT TRANS			*JAN.,	198
		0.015-					E LINEARIT			*		*NIC WIND TUNN		W. BALL R. EDWARDS	*	
(-151,/		OTELY C					ENSITIVITY	_				*L (UNITARY)				
		LEVON)					H NUMBER F			*		*	*-DM	5	*	
		O OF TH		-		-	-CUT SPEED			#		*	*		∓	
		UTTLE O				-	BODY FLAP,			*		*	*		*	
	-	TED IN					DER DEFLEC			*		*	*		*	
		RC 11-F					ND TO INVE			*		*	*		*	
		NIC MIN	D TUNNE	L *			THE INTER			*		*	*		*	
	* (LA77)		*			EFFECTS OF			* .		*	*		*	
	*			*			CONTROL S			*		*	*		*	
	*			*		*CE I	DEFLECTION	\$ *		*		*	*		*	
	*.			*		*		*		*		* '	*		*	
SFC					46-INCH SRB/TRU				FORCE	*1.46		*MSFC /		E. RAMSEY/MSF		
4TWT					ATED NOSE (MODE			•		*3.48		*MSFC -		W. SPARKS	*OCT.,	197
45	/*F	A 0.00	548 SCA	LE*4	86)	*08T	AIN IMPROV	ED A*		*		*14-INCH TRISC	N*M.	M. MOSER JR.	*	
121F	* 1	46-INCH	SOLID	R *		*ND	MORE ACCUR	ATE *		*		*IC WIND TUNNS	EL*-DM	S	*	
4-X	*0	CKET BO	OSTER F	REE*		*ROL	LING MOMEN	T DA*		*		*	*		*	
78195	*N	TRY CON	FIGURAT	*OI		*TA	ON SRB BY	USIN*		*		*	*		*	
	*N	(MSFC	MODEL N	*MUI		*G A	SENSITIVE	SIN*		*		*	*		*	
	B	ER 486)	OVER A	\ P		*GLE	COMPONENT	ROL*		*		*	*		*	
	· *O	RTION O	F THE F	₹EE*		*L B	ALANCENO	. 24*		*		*	*		*	
	*N	TRY FLI	GHT REG	*MIE		*7		*		*		*	*		*	
,	*E	IN THE	NASA/N	1SF*		*		*		*		*	*		*	
	*C	14-INC	H TRISC	* INC		*		*		*		*	*		*	
	*C	WIND T	UNNEL	*		*		*		*		*	*		*	
	*			*		*		*		*		*	*		*	
EDC	- *R	ESULTS	OF SRB	SE*7	5-OTS	*T0	OBTAIN PRO	*IMIX	FORCE	*0.010) /	*ROCKWELL/	∗ J.	J. DAILEDA, J	J.*DMS-DR	~2346
NTA	- *P	ARATION	TESTS	US*		*TY	FORCE AND	MOME*	14	* 4.5	5-	*AEDC -	*MAR	ROQUIN/RI	*VOLUME	01
IA	/*I	NG THE	0.010-5	SCA*		*NT	DATA FOR O	RB/E*		* 4.5	5	*SUPERSONIC WI	[N∗J.	E. VAUGHN	*JAN.,	197
142	*L	E SSV M	IODEL 75	5-O*		*T A	ND SRB WIT	H BO*		*		*D TUNNEL (A)	*M.	M. MOSER JR.	*	
₹-151,3	385*T	S IN TH	E AEDC	VK*		*OST	ER SEPARAT	ION *		*		*	*-DM	IS	*	
	*F	TUNNEL	. А	*		*MOT	OR PLUME E	FFEC*		*		*	*		*	
	*			*		*TS		*		*		*	*		*	
	*			*		*		*		*		*	*		*	
												•				

	,						,							
				WIND	TUNNEL TEST	/ 1	DMS DATA	PROCES	SING					2
	*	*		*		*		*MODEL		*	*	COGNIZANT	* BASI	С
TEST	* * REPORT	TITLE *	CONFIGURATIONS TESTED	* *	TEST PURPOSE	*	TYPE OF TEST	* *MACH	SCALE RANGE		* T *	EST DMS PERSONNEL	*PUBLICA *OR COMM	
AEDC	- *RESULTS O	F SRB SE*7	'5-OTS	*TO 0	BTAIN PROXII	ΛI∗F(ORCE	*0.010	,	*ROCKWELL/	*J. u	J. DAILEDA,	J.∗DMS-DR-	2341
SWTA	- *PARATION				DRCE AND MON			* 4.5		*AEDC -		OQUIN/RI	*VOLUME	
K1A IA142	/*ING THE O				ATA FOR ORB, D SRB WITH E			* 4.5		*SUPERSONIC WII *D TUNNEL (A)			*JAN.,	19
	B86+TS IN THE				R SEPARATION			*		*	*-DMS		*	
	*F TUNNEL				R PLUME EFF			*		*	*		*	
	*	*		*TS		*		*		*	*		*	
	*	*		*		*		*		*	* .		*	
AEDC SWTA	- *RESULTS O		5-015		BTAIN PROXIM DRCE AND MOM		DRCE	*0.010 * 4.5	•	*ROCKWELL/ *AEDC -). DAILEDA, : ROQUIN/RI	J.*DMS-DR- *VOLUME	
K1A	/*ING THE O				ATA FOR ORB			* 4.5		*SUPERSONIC WI			*JAN.,	197
IA142	*LE SSV MO				SRB WITH E			*		*D TUNNEL (A)		. MOSER JR.	*	
CR-151,3	887*TS IN THE	AEDC VK*			R SEPARATION			*		*	*-DMS	;	*	
	*F TUNNEL	A *			R PLUME EFFE	EC*		*		*	*		*	
	*	*		*TS		*		*		*	*		*	
UW	* *MATED AED	* * ~ 1 M A M V CI C	04 SCALE 747-10	* D+TD D	DOUTE A DAT	* [4 + E/	DDCE	* *0.04	,	* *BOEING /	* *D D	KNUDSEN, J.	* M*DUS_DD_	2247
LSWT			47 CAM/ORBITER-				UNCE	*0.15	•	*UW -		LZ.G. E. VEI		
1173	/*INVESTIGA		•	_	YNAMIC CHARA			*0.15		*LOW SPEED WIN			*JUNE.	198
CA 15A			47 CAM/ORBITER-			_		*		*TUNNEL	*R. H	I. LINDAHL	*	
CR-160,4	182*BOEING 74	7 CAM/O *L	T CONF	*H AN	YAW FOR AD)D*		*		*	*-DMS	,	*	
	*RBITER (M				NAL ORBITER			*		*	*		*	
	*284 E-6)				ENCE ANGLES,			*		*	*		*	
	*ION IN TH *SITY OF W				SETTINGS AN EFINE GROUND			∓		*	*		*	
	*N AERONAU	-			IMITY EFFECT			*		*	*		*	
	*BORATORY			*S.		*		*		*	*		*	
	*RSTEN WIN			*		*		*		*	*		*	
	*(CA15A)	*		*		*		*		*	*		*	
	*	*		*		*		*		*	*		*	

						WI	ND TUNNEL 1	TEST /	DMS DATA	PROCESSING					274
	*			*		*		*		*MODEL	*	*	COGNIZANT	* BASI	C
TEST	*			*	CONFIGURATION	1 S *	TEST	*	TYPE OF	* SCALE	* TESTING	* 7	TEST DMS	*PUBLICA	TIONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
,	_ *0	IATED AE		C+7	47-100 ALONE	.τ	O SUPPLEMEN	UT TAL *	EODOE	+ 0.04	*BOEING /	*P D	.KNUDSEN/ THE	*DMC-DD-	-2348
WT					47-100 WITH CA					* .0405/			ING CO.	*VOLUME	
78					YPE II KITS AT					* 0.15-	*LOW SPEED W			*JUNE	1980
15B	•		LE MODEL				IGURATIONS			* 0.15	*TUNNEL		V. KLUG	*	1500
–					47-100 WITH 43	-				* 0.15	*	*-DMS		*	
100,					TTACHED TO THE					*	*	*	•		
			COMBINAT				ITH CAM TY	_		*	*	*		*	
		•	E UNIVER		TI CAM		ODIFICATION			*	*	*		*	
			ASHINGTO				ON THE MA			•	*	*		*	
			ICAL LAB				FIGURATION				*	*		*	
			F.K. KIR	-			5 DEG. INC			*	*	*		*	
			TUNNEL			*	5 DEG. 1140.	*	*	*	*	*		*	
		A 15B)	. 011116	*		*		*		*	*	*		*	
	*	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		*		*				*	*	*		*	
ł		FSHLTS	OF TEST	C*C	ARRIER B29BW	45N*T	HIS TEST W	AS PAD*	FORCE	*0.04	*BOEING /	*W N	. WRIGHT/TBC	*DMS-DR	-2349
SWT				-	857M2526T14Q1						*UW -		A. SARVER	*NOV	197
184					15.1106.1V9.1					* 0.15-	*LOW SPEED W		-	*	
17	•	WIND T			'S1	_	CATION PRO			* 0.15	*TUNNEL	*-DM		*	
			. –		RBITER B26.10	-				*	*	*	•	*	
					4F8M16R5V8W110	•	•			*	*	*		*	
			4 AND O.		41 0/410/03/04/11		RUDDER, SI			*	*	*		*	
			E SHUTTL			-	AILERON,			*	*	*		*	
			MODEL 43				AND INCIDE			*	*	*		*	
	*0		MODEL 40	, ·		•	LES. TAILC			*	•	*		*	
		,					GROUND PR			•	*	*		*	
	_			-			ON BOTH L			•	•	•		*	
	-						UDINAL AND			•	*	Ţ		*	
	•			*			L-DIRECTIO			*	•	*		*	
	-			-			RACTERISTI			*	•	Ţ		-	
	Ī			-			ACH O.15.	CS AI T			*	Ţ		*	
	_			- T		- T- T-	ACT 0.13.			•		*		*	
RC	- +1	FSIII TS	OF DHASE	1	40B ORB MODI	. +T	O ORTAIN T	HEDMAI +	HEAT-TOAN	S*0 006 /	*ROCKWELL/	الفعا	W. CUMMINGS.	W*DMS-DD	-2350
DHT			AINT THE				ONTOURS	**		*8.0 -	*LARC -		. DYE/RI	*APRIL.	
			ING TEST		0 0		01110083	Ī		*8.O	*MACH 8 VARI			*	137
146	•		NG THE			-		-		*0.0			M. MOSER JR.	*	
			E MODEL			*		-		•	*RSONIC TUNK			-	
- 151,0			HE NASA			<i>∓</i>		.		- -	-KOUNTO LOND	1CL + "UM	J		
				_		# 4:				*	-	*		~	
			ABLE DEN	4 5₹		*		*		*	•	*		-	
		TY TUNN								-4-					

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,)))
		,	WIND TUNNEL TEST	/ DMS DATA	PROCESSING			275
TEST	*	* CONSTOURATIONS	* * **	* TVB5 OF	*MODEL	* TECTINO	* COGNIZANT	* BASIC
TEST ID		* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* * SCALE *MACH RANGE	E* TESTING E* AGENCY	* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
NRLAD	- *MEGINTO NE TEGT	0+0001TED 100 FODE!	TO COTATAL LOW CE	*F+F000CE	*0.18 -	**************************************	in n nueceu / p r	-DUC DD -0054
	- *RESULTS OF TEST C - *A238 USING THE SS		B*TO OBTAIN LOW SPI +ED AIR DATA SYSTI				*R.B.RUSSELL/ R.I. *R.R.BURROWS/ R.I.	
764	/*V VEHICLE 102 0.1		*M SIDE PROBE AND				D*W. B. MEINDERS	*
OA238	*O-SCALE FOREBODY	/ *	*FLIGHT TEST PROB	3E*		*TUNNEL	*-DMS	*
CR-160,8	853*MODEL NO. 99-0 IN		*PRESSURE DATA ON		*	*	*	*
	*THE NAAL LOW SPE		*THE OML FOREBODY		*	*	*	*
	*ED WIND TUNNEL TO *INVESTIGATE AIR		*MODEL 99-0, ALSO		*	*	*	*
	*INVESTIGATE ATR *DATA SYSTEM CHARA		*TO INVESTIGATE MO *DEL BLOCKAGE AND		*	*	* ·	*
	*CTERISTICS		*THE EFFECTS OF PI		*	*	*	*
	*		*OBE POSITION, PRO		*	*	*	*
	*	*	*BE SCALE AND PRO)B*	*	*	*	*
	*	*	*E ROLL ANGLES ON	1 *	*	*	*	*
	*		*ALL RECORDED PRES	.S*	*	*	*	*
	*	* *-	*SURE LEVELS	*	*	*	*	*
LARC	- *A STUDY OF TRANSC	**************************************	* **	.e+eub∪e *	* * 0.015/	* *! ADA /	* *BERNARD SPENCER C	* !=DHC_DD_00E0
	- *NIC BETA HYSTERES				,		*R./ LARC	U*UM5-UR-2352 *JAN., 1978
758	/*IS OF AN 0.015 SC		*F AN INVESTIGATION				N*GEORGE M. WARE/ L	
LA91	*ALE MODEL 44-0	*	*N IN THE NASA/			*IC PRESSURE TU		*
CR-151,?	383*(SPACE SHUTTLE OF	R*	*LARC 8-FOOT TRANS	NS *		*NNEL	*J. W. BALL	*
	*BITER TESTED IN T		*ONIC PRESSURE TU		*		*G. W. KLUG	*
	*HE NASA/LARC 8-FC		*NEL OF THE BETA		*	*	*-DMS	*
	*OT TRANSONIC)		*YSTERESIS EFFECT		*	*	*	*
	*PRESSURE TUNNEL (*LA91)	•	*OF AN O.015 SCALE *SSV ORBITER	£*	*	*	*	*
	*LADIJ *	*	*224 OKDITCK	*	*	*	*	*
ARC	- *SUBSONIC STABILIT	T*ALT	*TO EVALUATE THE S	S*FORCE	*0.030 /	*LARC /	*G. M. WARE, B. SP	* P*DMS~DR-2353
	- *Y AND CONTROL CHA		*TABILITY AND CON			•	*ENCER, JR./LARC	
213-1	/*RACTERISTICS OF A	A*	*ROL CHARACTERIST	Γ Ι *		*11-FOOT TRANSO	O*J. UNDERWOOD, P.	
LA89	*0.030-SCALE SPAC		*CS OF THE SHUTTLE			*NIC WIND TUNNE	• "	*
CR-160,8	827*E SHUTTLE ORBITER		*ORBITER IN THIS		*		*S. R. HOULIHAN	* .
*	*WITH TAILCONE (M *ODEL 201) TESTED		*ALT CONFIGURATION	N*	*		*B. J. BURST *-DMS	*
	*IN THE NASA/ARC 1		*	*	* ·	* •	*-DW2	*
	*1-FOOT TRANSONIC		*	*	*	*	* *	*
	*WIND TUNNEL (LA89		*	*	*	*	*	*
	*)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*

							WIND	TUNNEL 1	EST /	DM	IS DATA	PROCES	SSING					276
	*			*			*			• *		*MODEL		*	*	COGNIZANT	* BAS	IC
TEST	*			*	CONF	IGURATIONS	*	TEST	;	* T	YPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLIC	ATIONS
ID	*	REPOR	T TITLE	*		TESTED	*	PURPOSE		* 	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
AEDC		DECIU TO	OF CDD	55+14	10051	75-OTS (WI	N+TO	COMPLETE	DATA	. FOT		*4.0		*ROCKWELL/	1	J. DAILEDA	0+DMC-DD	-2254
SWTA			N TESTS			19-012 (MI		DS IN THE	-		CE	*4.0 *5.0				H. SPANGLER		
P8A		THE THE	0.040	05+6	,			ARATION A				*5.0				E. VAUGHN		
	- / [TING THE	0.010 MODEL 7	5-A+				BASE FOR				-				G. MCDONALD		1976
			HE AEDC									<u> </u>		TO TORNEL (A	, +G. +-C			
CK-151. TM-X								ME-ON AND OFF CONDI				-		-	+-L	/M3	-	
1M-X		T TUNNE	L A (IA	143+				OFF COND	I TON2	-		-		-	-		-	
	.	,		*			*.			*		*		*	-		•	
AEDC		DECINTO	OF CDB	* CE+1	IODEI	TE-DIC (WI	*	COMPLETE	DATA			*4.0	_	* *DOCVWELL/		J. DAILEDA	D+DMC=DD	-2254
SWTA			N TESTS			75-0TS (WI					KCE	*4.0 *5.0		*AUCKWELL/		H. SPANGLER		
PBA	- +	THE THE	W 16212	U3+6	''			DS IN THE	_			*5.0		*SUPERSONIC \			*FEB	
PBA IA143			MODEL 7					ARATION A				*			-	G. MCDONALD		1976
			HE AEDC					BASE FOR				*		*U TUNNEL (A	, +G. +-[-	
TM-X			L A (IA					ME-ON AND				.		*	+-L	MO	-	
2)	L A (IA	143*			*ME-	OFF COND	1110N2	∓		*		# #			*	
2	7	,		*			*.			∓		* -		*	.		<u>.</u>	
AEDC	7	000111 70	. 05 500	~ *		75 OTC /WT	*			* *	205	*4.0		**	* .	J. DAILEDA	D+DMC-DD	-0054
SWTA						75-OTS (WI					KCE	*4.0 *5.0		•				
DWIA	- *	THO THE	N 15212	U\$*6	1)		* 401	DS IN IHI	: 2KB	*		*5.U		*AEDC -		H. SPANGLER E. VAUGHN		
PBA IA143	/*	ING INE	0.010 MODEL 7	SUA*			*5EP	ARATION A	AERU D	*		*						1970
			HE AEDC					BASE FOR				*		*D TUNNEL (A		, G. MCDONALD DMS	*	
TM-X								ME-ON AND				*			# L	JM2	*	
3 1M-V) LÓNNE	L A (IA	143*			*ME *	OFF COND	I I TOM2	*		*		* *	-		•	
3	-	,		-			*.			-		<u>-</u>		T	-		-	
AEDC		DECIU TO	05 600	*	ione:	75-OTS (WI	* N+TC		DATA	+ + = ^ -	205	*4.0	_	*DOCKMEII /	T. 1	. J. DAILEDA	D+DMC-DD	-2254
SWTA											KCE.	*4.0 *5.0		*AEDC -		H. SPANGLER		
P8A	- ,=	THE THE	N TESTS	U5*6	,		* A O T	DS IN THE	- 2KB	-		*5.0				H. SPANGLER E. VAUGHN		
PBA IA143	/ -	TING IND	MODEL 7	36A*			# 5 E P	AKAILUN A	ACKU U	-		- -				. G. MCDONALD		15/6
CD-454	404	TC TN 1	HE AEDC	J-U+			*A1A	DADE FUI	T BUIN	- -		-		TO TORNEL (A		. G. MCDUNALU DMS	•	
TM-X	4047	F THINKS	L A (IA	1/2+			+ME-	OFF COND	J PLU ITIONS	- -		÷		<u>.</u>	*-t	ZMO	±	
1 PT - A	-	. I CHAIAE	.L A (1A	143+				OFF CUND	T I TOM2	- -		•		-	-		*	
7	-	,					*.			-		-		•	-		<u>.</u>	
	*			*			7			~		7		T	7		₹	

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						WIND	TUNNEL	TEST /	DMS DATA	PROCE	SSING						277
	*			*		*		*		*MODE	 L *		*	cc	GNIZANT	* BASIC	;
TEST	*			*	CONFIGURATIO	NS *	TEST	*	TYPE OF	*	SCALE*	TESTING	*	TES	ST DMS	*PUBLICAT	IONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOS	E *	TEST	*MACH	RANGE*	AGENCY	*	PE	RSONNEL	*OR COMME	NTS
_																	
					17 C7 E22 F7				EAT-TRAN			ROCKWELL/			GRIFALL/RI	_	
			THE .017 SPACE SHU		104		YNAMIC H			*8.0		AEDC -			MARTINDALE	, *JUNE,	1977
13/210 18			TER MODE			*NTR	ECTS DUR	ING E *		*		SUPERSONIC WII D TUNNEL (A)		E.	KAUL/ARU	*	
			DUCTED I			*N1R	ı	*		÷	T1	D TUNNEL (A)	Ţ.			*	
51,00			VKF TUN			*		*		*	*		*			*	
			DETERMI			*		*		*	*		*			*	
			EATING C			*				*	*		*			•	
		RACTERI		*		*		*		*	*		*			*	
	*		31103	*		*		*		*	*		*			*	
		ERODYNA	MIC HEAT	T * M	ODEL 83-0 (B6	O C*TO	INVESTIG	ΔTF FF∗⊢	FAT-TRAN	s*0 04	0 / *	ROCKWELL/	*R	.1	HERRERA/RI	*DMS-DR-2	356
			TS OBTAI				TS OF PR		ical Titali	*7.90	•	AEDC -			SARVER	*MAY.	1977
			G TEST O		•,		ES ON AE			*8.0		HYPERSONIC WIN				*	
	•		CTED IN				HEATING			*		D TUNNEL (B)			MODER OR.	*	
			VKF TUNN				S ORBITE			*	*	- (0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*			*	
, • .			IG THE O.			_	E NOSE.	_		*	*		*			*	
			MODEL 8				ND SIDE			*	*		*			*	
		-	E SPACE			*		*		*	*		*			*	
			RBITER F	-		*		*		*	*		*			*	
			FTY PERC	-		*		*		*	*		*			*	
		T FUSEL		*		*		*		*	*		*			*	
	*			*		*		*		*	*		*			*	
	- *R	ESULTS	OF ASCEN	T*I	NTEGRATED VEH	ICL*TO	DBTAIN A	ERODYN*H	EAT-TRANS	* 0.0	175 / *1	ROCKWELL/	∗W.	н.	DYE/RI	*DMS-DR-2	357
			MIC HEAT				C HEAT T			*5.3		ARC -			HOULIHAN	*JUNE.	1983
	/*I	NG TEST	S ON THE	*0	RBITER PLUS T			_		*7.4		3.5-FOOT HYPE	_			*	
					RBITER, TANK,					*		SONIC WIND TU				*	
67.69					SRB ALONE	*URA		*		*		NEL	*	-		*	
•			AND 7.4			*		*		*	*		*			*	
			SA/AMES			*		*		*	*		*			*	
			HWT, USI			*		*		*	*		*			*	
			0175-SCA			*		*		*	*		*			*	
	*E	MODEL	60 OTS (I *		*		*		*	*		*			*	
	*H	68)	· ·	*		*		*		*	*		*			*	
		•		_													

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			WIND TUNNEL	TEST / DMS	DATA PROCESSI	NG		278
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURA * TESTE				CALE* TESTING ANGE* AGENCY	* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
AEDC	- *AERODYNAMIC HEA	ATI*FORWARD 50	PERCEN*TO INVESTI	GATE EF*HEAT-	TRANS*0.040	/ *ROCKWELL/	∗w. H. DYE/RI	*DMS-DR-2358
HWTB	- *NG RESULTS OBTA	AIN*T FUSELAGE,	MODEL*FECTS OF P	ROTUBER*	*7.90 -	*AEDC -	*D. A. SARVER	*JUNE, 1977
58A	/*ED DURING TEST	OH*83-0	*ANCES DN A	ERO. HE*	*8.00	*HYPERSONIC	WIN*M. M. MOSER JR.	*
OH5OB	*50B CONDUCTED I		*ATING ON N	OSE, CA*	*	*D TUNNEL (B) *-DMS	*
CR-151,	067*THE AEDC VKF TL	UNN*	*NOPY, SIDE	WALLS *	*	*	*	*
	*EL B USING THE		*	*	*	*	*	*
	040-SCALE 83-0	OF	*	*	*	*	*	*
	*THE SPACE SHUTT	TL *	*	*	*	*	*	*
	E ORBITER FORWA	ARD	*	*	*	*	*	*
	*FIFTY PERCENT F	FU *	*	*	*	* .	*	*
	*SELAGE	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
CALSPAN	- *RESULTS OF HEAT	T T*ROCKWELL VE	HICLE *OBTAIN SPA	NWISE H*HEAT	TRANS*0.025	/ *ROCKWELL/	*C.L.BERTHOL/ROC	KW+DMS-DR-2359
96HST	- *RANSFER TESTING	G O*3 (MODIFIED) SHUT+EAT TRANSF	ER RATE*	*9.88 -	*CALSPAN -	*ELL	*MARCH, 1978
131	/*F AN 0.025-SCAL	LE *TLE ORBITE	. MOD*DISTRIBUTI	ONS ON *	*10.0	*96-INCH HY	PERS*H.GOROWITZ/ROCK	(WE*
0H66	*MODEL (66-0) OF				*	*ONIC SHOCK	TUN*LL	*
CR-151.	405*THE SPACE SHUTT	TLE*	+OF THE CLO		*	*NEL	*J. E. VAUGHN	*
•	*ORBITER CONFIGU *ATION 140B IN 1	UR *	*WING. ESPE		*	*	*-DMS	*
	ATION 140B IN T	THE	*SHOCK INTE		*	*	*	*
	*CALSPAN HYPER-	*	*E PEAKS.		* -	*	*	*
	*SONIC SHOCK TUN			· · · • · ·	*	*	*	*
	*L (OH66)	*	*TRIBUTIONS		*	*	*	*
	*	*	*TO A LEADI		*	*	•	*
	*	*	*E AT SIX S		*	*	*	*
	*	*	*LOCATIONS.		*	*	*	*
		•	- LUCATIONS.			<u>.</u>	•	•

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			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			279
TEST ID	* * * REPORT TITLE	* * CONFIGURATION * TESTED	* S * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
975WT 119-1 875WT 119 0A221B/C CR-160,5 4RC 975WT 119-1 875WT 119-1 875WT	- *OF THE SPACE SHI /*TTLE ORBITER PR - *ARY AND ALTERNA' /*AIR DATA SYSTEM: *USING A O.10-SC. 21*LE ORBITER FOREI *DY MODEL (99-0) *N THE NASA AMES *ESEARCH CENTER S *X 7 AND 8 X 7-FI *T LEGS OF THE UI *TARY PLAN WIND STARY PL	TIM* TE* IS * IS * IS * IS * IS * IS * IS * IS	*SYSTEM PROBE PI *T AND STATIC PR *SURE ERRORS;DET *MINE PROBE SCAL *EFFECT ON THE S *TIC PRESSURE CA *BRATION;CALIBRA *THE ANGLE-OF-AT *CK SENSOR; EVAL *TION OF BOTH FL *H PORT AND INST *MENTED REACTION *ONTROL SYSTEM T *USTER AIR DATA *STEMS	TO* EES* EER* ETA* LLI* LTA* LUA* LUA* LUC* HRX* FORCE TO* EES* EE * TA* LLI* LL	*1.6 - *3.5 * * * * * * * * * * * * *	*ARC *9-FOOT BY 7-FO *OT SUPERSONIC *WIND TUNNEL (U *NITARY) *8-FOOT BY 7-FO *OT SUPERSONIC *WIND TUNNEL (U *NITARY) * * * * * * * * *ROCKWELL/ *ARC -	* * * * * * * * * * * * *	*DEC., 1980 * * * * * * * * * * * * *
	*NNEL (DA221B AND *C)	D * * *	*ONTROL SYSTEM T *USTER AIR DATA *STEMS		* * *	* :	* * *	* * *

						WIND	TUNNEL TEST	/	DMS DATA	PROCE	SSING							280
	*			*		*		*		*MODE	 L	*	*		COGNIZAN	 Т	* BASI	C
TEST	Г *			*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	Т	EST DMS		*PUBLICA	SMOITA
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	-	PERSONNEI	L 	+OR COM	MENTS
NRLAD					58C12E55F10M16N2							*ROCKWELL/			MENNELL/I			
LSWT							CTIVE WAS TO		PRESSURE	*0.17	-	*NRLAD -			INTERNAT			
768		ST USING		_			FY ORBITER L			*		*LOW SPEED					*OCT.,	1977
OA 163B	*	-SCALE M	ODEL (16	-*		*NDIN	IG GEAR SYSTE	M *		*		*TUNNEL			. KLUG		*	
CR-151	,370*	O) OF THI	E SPACE	5*		*PRES	SURE LOADING	*		*		*	*	-DMS			*	
	*	HUTTLE OI	RBITER I	N*		*AND	HINGE MOMENT	*		*		*	*				*	
	*	THE ROCK	WELL INT	*		*LEVE	LS OBTAINED	*		*		*	*				*	
	*	ERNATION	AL NAAL	W*		*DUR	NG THE TEST	₽*		*		*	*				*	
		IND TUNN	EL (OA16	3*		*ERIC	D 0A163.	*		*		*	*				*	
	*	в)		*		*		*		*		*	*				*	
	*			*		*		*		*		*	*				*	-
NRLAD	- *	RESULTS (OF A LAN	D*B	8C12E55F10M16N2	3HT*	PRIMARY TEST	· * F	FORCE	*0.04	05 /	*ROCKWELL/	′ *	R.C.	MENNELL/	ROCK	+DMS-DR	-2361
LSWT							CTIVE WAS TO			+0.17	- '	*NRLAD -	. *	ELL	INTERNAT	IONAL	*VOLUME	02
768	/*	ST USING	A 0.040	5*		*VER	FY ORBITER L	A *		*		*LOW SPEED	WIND*	D.W.	HERSEY	•	*OCT.,	1977
OA 163B	*	-SCALE M	ODEL (16	-*		*NDI	IG GEAR SYSTE	М*		*		*TUNNEL	*	G. W	. KLUG		*	
CR-151	,371*	O) OF THE	E SPACE	S*		*PRE	SURE LOADING	*		*		*	*	-DMS			*	
	*	HÚTTLE OI	RBITER I	N*		*AND	HINGE MOMENT	*		*		*	*				*	•
	*	THE ROCK!	WELL INT	*		*LEVI	LS OBTAINED	*		*		*	*				*	
	*	ERNATION	AL NAAL	W*		*DUR	NG THE TEST	P*		*		*	*				*	
	*	IND TUNN	EL (OA16	3*		*ERIC	D 0A163.	*		*		*	*				*	
		8)		*		*		*		*		*	*				*	
	*			*		*		*		*		*	*				*	
LARC	- *	RESULTS (OF FLUTT	E * 5	5-0 (FIN, RUDDER	**TO :	NVESTIGATE F	L*5	STRUCT-DY	N*O. 14	/	*ROCKWELL./	/ *	C. L	. BERTHO	LD/R1	*DMS-DR	-2363
TDT.		R TEST O					R BOUNDARIES			*095		*LARC -		F. R	AUCH, G.	COMM	A*APRIL.	1977
246	/*	ED USING	THE O.1	4*		*		*		*1911		*TRANSONIC						
057	-	-SCALE S			•	*		*		*		*MICS TUNN		GRUM			*	
CR-151		TLE ORBI				*		*		*		*			. SARVER		*	
	-	UDDER MO	•			*		*		*		*			. MOSER		*	
		R 55-0 I				*		*		*		*		-DMS			*	
		A LARC 1		_		*		*		*		*	*				*	
		ANSONIC				*		*		*		*	*				*	
		WIND TUN		*		*		*		*		*	*				*	
	*		_	*		*		*		*		*	*				*	

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								•						4	•
:					WIND TU	JNNEL TEST	 r /	DMS DATA	PROCES	SING					281
															
TEST ID	* * * REPOR	T TITLE	* CON	FIGURATIONS TESTED		TEST PURPOSE	*	TYPE OF TEST	*MODEL * *MACH	SCALE	* * TESTING * AGENCY	* *	COGNIZANT TEST DMS PERSONNEL	* BAS *PUBLIC *OR COM	CATIONS
ARC [*]	- *RESULTS	OF AN I	NV+B75C1	6E64F16FD3FR	*VERIF	ORBITER	VE*F	FORCE	*1.5	-	*ROCKWELL/	*R.	H. MULFINGER	R*DMS-DF	2-2364
				M52N108N109N				PRESSURE	*2.5		*ARC -		WELL INTERNAT		_
118-1	-			11R20V27VT10					*				AL SPACE DIVIS	SI*FEB.,	1981
0A145B				T12VT13VT14					*		*OT SUPERSON		44 44444	*	
CK-160.5	ICS UTI			T16VT17W131					*		*WIND TUNNEL	(U*M. *-D)		*	
	+.05-SCA					2)CONTROL HINGE MON	-		*		*NITARY)	*-01	12	*	
	*LITY RE		*			REYNOLDS	4 (13)		*		*	<u>.</u>		*	
	CONTROL					R EFFECTS	4)		*		*	*		*	
	*-0) IN	•				RESIS AND			*		*	*		*	
	*ESÉARCH					SURFACE			*		*	*		*	
	ITARY W	IND TUNNE	EL			ONS(5)	*		*		*	*		*	
	*(OA145B)	*		*PROPOS	ED INBOAF	₹/ds		*		*	*		*	
	*		*		*OUTBO	ARD ELEVON	1 I*		*		*	*		*	
	*		*			CTION MATE	1 M*		*		*	*		*	
	*		*		*ODEL		*	•	*		*	*		*	
480	*	05 44 41	*	050454050050	*		*		*		*	*		*	
ARC 97SWT				6E64F16FD3FR M52N108N109N					*1.5		*ROCKWELL/		H. MULFINGER		
118-1				1 1R20V27VT 10				KE220KE	*2.5		*ARC -		WELL INTERNAT L SPACE DIVIS		-
0A145B				T12VT13VT14					*		*OT SUPERSON		IL SPACE DIVIS	*	1301
				T16VT17W131					*		*WIND TUNNEL		M MANN	*	
	*ICS UTI)CONTROL			*		*NITARY)	*-DI		*	
	*.05-SCA				•	HINGE MON			*		*	*		*	
	*LITY RE	AOTE	*		*TS(3)F	REYNOLDS	*		*		*	*		*	
	CONTROL	MODEL (3	39		*NUMBER	R EFFECTS	4)*		*		*	*		*	
	*-0) IN				*HYSTER	RESIS AND	CO*		*		*	*		*	
	ESEARCH					SURFACE I	NT		*		*	*		*	
	ITARY W		L			ONS(5)	*		*		*	*		*	
	*(OA1458)	*			SED INBOAR	•		*		*	*		*	
	. *.		*			RD ELEVON			*		*	*		*	
	*		*			CTION MATH	1 M*		*		* *	*		*	
	*		*		*ODEL *		# *		-		+ ±	*		-	
	•		-		•		-		· -		-	•		-	

			WIND TUNNEL	TEST / DMS D	ATA PROCESSI	NG		282
	+	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST			IRATIONS * TES	T * TYPE		ALE* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT	TITLE * TES	STED + PURPO	SE * TES	T *MACH RA	NGE* AGENCY	* PERSONNEL	*OR COMMENTS
								- /
ARC 97SWT			F16FD3FR*VERIFY ORB		*1.5 -	*ROCKWELL/	*R. H. MULFINGE	
9/5WI 118-1			1108N109N*HICLE 102		IRE *2.5	*ARC -		
OA145B			OV27VT10*AMIC CHAR		*		7-FO+ONAL SPACE DIV	ISI*FEB., 1981
			/T13VT14 *GARD TO: (*	*OT SUPERSON		
CK-160,			/T17W131 *STABILITY		*		L (U*M. M. MANN	*
		IZING AN *	*TROL(2)CON		*	*NITARY)	*-DMS	*
		E HI-FIDE*	*RFACE HING		*	*	*	*
	*LITY REMO		*TS(3)REYNO		*	*	*	*
		MODEL (39*	*NUMBER EFF	, ,	*	*	*	*
		HE AMES R*	*HYSTERESIS		*	*	*	*
		CENTER UN*	*NTROL SURF		*	*	*	*
•		ND TUNNEL*	*ERACTIONS(*	*	*	*
	*(OA145B)	*	*PROPOSED I	NBOARD/*	*	*	*	*
	*	*	*OUTBOARD E		*	*	*	*
	*	*	*NTERACTION	I MATH M∗	*	*	*	*
	*	*	*ODEL	*	*	*	*	*
	*	*	*	*	*	*	*	*
LARC		OF FLUTTE*MODEL 54.	O *TO DETERMI	NE FLUT*STRUCT		/ *LARC /		./L*DMS-DR-2365
TDT	- *R TEST O	S6 OBTAIN*	*TER, BUFFE	T, AND +	*0.3 -	*LARC -	*ARC	*APRIL, 1977
246	/*ED USING	THE 0.14*	*ELEVON BUZ	Z BOUND*	*1.1	*TRANSONIC I	DYNA∗M. M. MOSER JR	. *
0 56	*-SCALE W	ING/ELEVO*	*ARIES	*	*	*MICS TUNNE	L *-DMS	*
CR-151,	O56*N MODEL	(54-0) IN*	*	* <i>i</i>	*	*	*	*
•		LARC 16 *	*	*	*	*	*	*
	-FOOT TRA	ANSONIC D	*	*	*	*	*	*
		WIND TUNN*	*	*	*	*	*	*
	*EL	*	*	*	*	*	*	*
	*	<u>.</u>		*	*	·	*	•
AEDC	- *HEAT TOAT	NSEED DHA + 1400 (R4	7C7E22F5M+TO INVESTI	GATE EN*HEAT-1	DANS*0 0175	/ *DUCKMEII/	*W. H. DYE/RI	*DMS-DR~2366
HWTB		E PAINT T*4R5V7W10			*7.88 -	*AEDC -	*L. L. TRIMMER/	
	/*ESTS OF		*EATING EFF		*8.0		WIN*D. A. SARVER	* 1577
0H25B		L (NO. 56*	*EAITING EFF	ECI3 +	*0. U	*D TUNNEL (. I
	7ALE MODE 063*-0) OF TI		-	- -	-	*D IONNEL ()	B) *M. M. MUSEK UK *~DMS	· · · · · · · · · · · · · · · · · · ·
OK- 131,		NATIONAL *	I	+	*	*	±-∩w2	T
			# 	*	*	# •	*	∓
		UTTLE OR*	∓	∓	∓	# 	≠ ,	∓
		THE AEDC*	₹	#	*	₹	*	≠
	_	HYPERSO *	*	*	*	*	#	*
	*NIC WIND	TUNNEL *	*	*	*	*	*	*
	*	*	* *	*	*	*	*	*

			WIND TUNNEL TEST /	/ DMS DATA	PROCESSING			283
	*	*	*	*	*MODEL ,	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE *	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	* TYPE OF * TEST	* SCALE			*PUBLICATIONS *OR COMMENTS
NEDC -	*RESULTS OF A HIGH	*MODEL 91-0 ORB'	I*OBTAIN STATIC PRE	E*HEAT-TRANS	S* 0.0175 /	*ROCKWELL/	*PAUL LAMOINE/RI	*DMS-DR-2367
IWTB -	+ANGLE-OF-ATTACK	*TER 102, DRWG VC-	-*SSURES ON UPPER A	A *	*7.94 -	*AEDC -	*J. L. GLYNN	*MAY, 1979
	/*AERO HEATING PRES*		*ND LOWER WING SUR			*HYPERSONIC WIN		*
	SURE TEST ON A O. *3*O175-SCALE MODEL *		*FACES AND VERT. *TAIL FOR FLOW FIE		* ,	*D TUNNEL (B)	*-UMS	*
,,,,,,,	*(92-0) OF THE OV-		*LD DEFINITION	*	*	*	*	*
	*102 CONFIGURATION		*	*	*	*	*	*
	*SPACE SHUTTLE OR *		*	*	*	*	*	*
	BITER IN THE AEDC		*	*	*	*	*	*
	*VKF TUNNEL B (OH *	*	*	*	* *	*	*	*
	*57A/B) *	*	*	*	* *	* 	*	*
_ARC -	* - *RESULTS OF PHASE *	* *MODELS 46-0, 64-0	* A±TO INVESTIGATE DE	* -1±HFAT-TDANG	* . **	* *ROCKWELL/	* *J. W. CUMMINGS/RI	* :±DMS~DD~2368
	- *CHANGE HEAT TRANS	•	*ASE CHANGE PAINT	-				*APRIL, 1977
	/*FER TEST OH51 USI*		*HEATING EFFECTS O				*M. M. MOSER JR.	*
DH5 1	*NG O.OO6-SCALE SP*	*	*N ORBITER AND PAR	R*	* *	*W HYPERSONIC T		*
CR-151.05	8*ACE SHUTTLE ORBIT*		*TIAL WING; WING T		* *	*UNNEL :	*	*
	ER MODELS 46-0 AN		*ESTED WITH SHOCK		*	*	*	*
	D 90-0 AND PARTIA *L WING 0.0175-SCA*		*GENERATOR AT VARI *OUS POSITIONS	. *	* -	*	*	*
	L WING 0.01/5-5CA *LE MODEL 64-0 IN *		*002 L021 1 1042	*	*	* *	*	*
	*THE LARC 31-INCH *		*	*	*	*	*	*
	*CFHT *	*	*	*	• ,	*	*	*
	*	*	*	*	* .	*	*	*
	- *AN AERODYNAMIC ST*						-	*DMS-DR-2369
	ATIC STABILITY WI /*NO TUNNEL TEST OF:		*ORCE DATA OF SRB		-			*FEB., 1982
5431F	/*ND TUNNEL TEST OF* *A 0.00856 SCALE *		*AT REENTRY MACH N *UMBERS AND ATTITU			*HIGH REYNOLDS :	*M. M. MOSER JR. J*-DMS	*
	15*MODEL OF THE SPAC*		*DES	*		*NNEL	*	*
	E SHUTTLE 146 INC		*	*	*	*	*	*
	*H DIAMETER SOLID *		*	*	* *	*	*	*
	ROCKET BOOSTER RE		*	*	* *	*	*	*
	ENTRY CONFIGURATI *ON (MSFC MODEL 48*		*	*	* *	*,	*	*
	UN (MSFC MUDEL 48 *7) IN THE NASA/MS*		*	*	* -	* -	*	* -
	*FC HIGH REYNOLDS *		*	*	*	• •	* •	. ■
	NUMBER WIND TUNNE		*	*	* :	*	*	*
	*L *	*	* .	, *	* ;	* , ·	*	*
	* *	•	*	*	* '	*	*	*

	*			*		*		*		*MODEL		*	*	COGNIZANT	* BASI	
TEST ID			T TITLE		CONFIGURATIONS TESTED	*	TEST PURPOSE		TYPE OF TEST			* TESTING * AGENCY	*	TEST DMS PERSONNEL	*PUBLICA *OR COMM	
:					,									·		
					B70C9E44F9M16N28R					*1.6		*ROCKWELL/	_	CHEE/ROCKWELL		
					5V8W116(ORBITER)				RESSURE	*3.5		*ARC -		TERNATIONAL		-
			URE LOADS			*IGH	ALPHA/BETA	CO*		*				MARROQUIN/ROCK		1980
			HUTTLE OI			*MBIN	NATIONS FOR	*		*				LL INTERNATION	A *	
	-		DEL (47-0				H RANGE 1.6	TO*		*		*WIND TUNNEL (*	
			NASA/ARC			*3.5		*		*		*NITARY)		M. MANN	*	
CR-151,7			PLAN WII	ND*		* .		*		*		*8-FOOT BY 7-F	_	4S	*	
	*	TUNNEL		*		*		*		*		*OT SUPERSONIC			*	
	*			*		*		*		*		*WIND TUNNEL (U*		*	
	*			*		*		*		*	ř	*NITARY)	*		*	
	*			*		*		*		*		*	*		*	
					B70C9E44F9M16N28R					*1.6	- *	*ROCKWELL/		CHEE/ROCKWELL		
-					5V8W116(ORBITER)	*RES	SURE DATA AT	T H*P	RESSURE	*3.5	ř	*ARC -	*IN	TERNATIONAL	*VOLUME	02
	•		URE LOADS	_			I ALPHA/BETA			*				MARROQUIN/ROCH		1980
			HUTTLE O				NATIONS FOR			*				LL INTERNATION	A *	
			DEL (47-				H RANGE 1.6	TO*		*		*WIND TUNNEL (*	
			NASA/ARC			*3.5		*		*				M. MÄNN	*	
CR-151,7			PLAN WII	ND*		*		*		*		*8-FOOT BY 7-F		4S	*	
	*	TUNNEL		*		*		*		*		*OT SUPERSONIC			*	
	*			*		*		*		*		*WIND TUNNEL ((U*		*	
	*			*		*		*		*		*NITARY)	*		*	
	*			*		*		*		*		*	*		*	
					B70C9E44F9M16N28R					*1.6				CHEE/ROCKWELL		
					5V8W116(ORBITER)					*3.5		*ARC -		TERNATIONAL	*VOLUME	• -
										*				MARROQUIN/ROC		1980
	_		HUTTLE O				NATIONS FOR			*				LL INTERNATION	A *	
			DEL (47-				H RANGE 1.6	TO*		*		*WIND TUNNEL (*	
			NASA/ARC			*3.5	į.	*		*		*NITARY)			*	
CR-151,7			PLAN WI	.ND*		*		*		*		*8-FOOT BY 7-F		45	*	
	*	TUNNEL		*		*		*		*		*OT SUPERSONIC			*	
	*			*		*		*		*	,	*WIND TUNNEL ((U*		*	
	*			*		*		*		*	,	*NITARY)	*		*	
	*			*		*		*		*		*	*		*	
					,											

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								•	,							,
						WIND	TUNNEL	TEST /	DMS DATA	PROCE	SING					285
		·		*		*				*MODE!	*		*	COGNIZANT	* BASI	ic
TEST ID	*	REPOR	RT TITLE	*	CONFIGURATIONS TESTED	*	TES PURPO		TYPE OF	*	SCALE* RANGE*		*	TEST DMS PERSONNEL	*PUBLICA	ATIONS
sc		.ntcin Te	. OE BACI		DRITED VEHICLE	 4+TO	MEACURE		JUÉAT TOAL	r	·	DOCKWELL /		D CARTON/OT	*DUC DD	.0074
			TESTS ON		RBITER VEHICLE			TES AND		*	-	ROCKWELL/ JSC -		P. GARTON/RI E. VAUGHN	*DMS-DR-	1978
H78			CALE SPACE		•			ISTRIB *		*	*	030	*-DM		*	7375
R-151,4			ORBITE					UT THE *		*	*		*	. •	*	
			ODEL 65					E ORBIT		*	*		*		*	
			NASA/JSC					DURING*		*	*		*		*	
			. VACUUM	СН∗				GE ASC 4	ı	*	*		*		*	
	4	AMBER A	١.	*		*ENT		*	•	*	*		*		*	
EDC	_ :	DECHITO	OF HEAT	* *	те	* *TO /	ODTATAL	H T AND =	· ·HEAT-TRAN	*	- *	ROCKWELL/	*	u ove /pr	* *DMS-DR-	.0070
WTA					ANK ALONE			NAMIC H		*4.02		AEDC ~		H. DYE /RI C. ALLEN	*NOV.,	1981
					EFT SRB ALONE			ER DATA		*		SUPERSONIC WI			*	1301
H72				-	IGHT SRB ALONE			CE SHU *		*		D TUNNEL (A)			*	
R-160,8			EHICLE N					RATED V*		*	*		*-DM		*	
	*	EL 60-0	TS IN TH	∃E *		*EHI	CLE DUR	ING LAU+		*	*		*		*	
			F TUNNEL	. A*		*NCH	CONDIT	IONS *	ı	*	*		*		*	
		(IH72)		*		*		*	:	*	*		*		*	
400		FEFFOT	05 7411	*	ADO BULLE MODEL	*		*		*	*		*		*	0070
ARC					ARC BUILT MODEL 01-0 0.030 SCALI					*0.4 *0.6		LARC / LARC -		NARD SPENCER, / NASA LARC		
69					SV ORBITER WITH					*0.6				RGE M. WARE/N	*MARCH,	1981
A99					EMOTE ELEVONS			BETWEEN*		*		IC PRESSURE T			*	
			CTERIST		20012 22210113			STS OA1*		*		NNEL	- •	G. MCDONALD	*	
			030 SCAL					9. RUDD*		*	*		*-DM		*	
	*	(REMOTE	LY CONTR	OL*		*ER	AND BOD	FLAP C*	ı	*	*		*		*	
	*	LED ELE	VON, BOD	YF*		*ONT	ROL EFF	ECTIVEN+	ı	*	*		*		*	
			RUDDER)					r condi*		*	*		*		*	
			1-0 ALT					DETERM+		*	*		*		*	
			ESTED IN					LL AS C*		*	*		*		*	
		OT TPT		*UT				+ECTION *STABIL		*	*		*		*	
			(200)	*		*ITY		JIADIL*		*	*		*		*	
						*					Ι					

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TEST		05505			CONFIGURATIONS		TEST		TYPE OF		SCALE	* TESTING	* T	COGNIZANT EST DMS	*PUE	BASIC BLICATION
ID	*	REPORT	IIILE	*	TESTED	* P	URPOSE	*	TEST	*MACH	RANGE,	* AGENCY	*	PERSONNEL	≠UK	COMMENTS
CALSPAN	- *I	NVESTIGA	TIONS I	N*R2	OF4M16W87E19V5R	*TO DET	FRMINE ST	IN*F	DRCF	*0.01	65 /	*LARC /	*B. S	PENCER/LARC	*DM	S-DR-2374
					C4				31.02	* 0.		*CALSPAN -				T 198
T18-111							ORBITER W			* 0.		*8-FOOT TRANSON			*	
T18-113	• .					*H TAIL		*		*		IC WIND TUNNEL			*	
LA82	•	NE STING				*		*		*		*	*-DMS		*	
LA103		ECTS ON				*		*		*		*	*		*	
CR-167.3				-		*		*		*		*	*		*	
,.		ACE SHUT				*		*		*		*	*		*	
		ER MODEL		-		*		*		*		*	*		*	
		AILCONE				*		*		*		*	*		*	
		03)	(=,,-,	*		*		*		*		*	*		*	
	*			*		*		*		*		*	*		*	
ARC	- *R	ESULTS C	F AIR I	A+OR	BITER VEHICLE	*OBTAIN	ORBITER	AI+F	DRCE	*00.1	1-	*ROCKWELL/	*R.R.	BURROW/RI	*DM	S-DR-2375
							SYSTEM L			* 0.2		*ARC -		MAKI/ARC	_	C., 198
500		ION TEST					CALIBRAT			*		*40-FOOT BY 80-			*	
0A237	-	IE 0.10-5				_	ONSTATE T			*		*FOOT SUBSONIC	*-DMS		*	
CR-160.5	30+0	E SHUTTL	E ORBIT	E*		*T FORE	BODY MODE	L *		*		*WIND TUNNEL	*		*	
•		VEHICLE					ROVIDE FL			*		*	*		*	
	* E	BODY MOD	DEL 99-0	* (*ORBITE	FLOW FIE	L *		*		*	*		*	
	* I	N THE NA	SA 40)	(*		*D SIMU	LATION AT	T*		*		*	*		*	
	* 8	O-FOOT S	SUBSONI	*		*HE AIR	DATA PRO	18E*		*		*	* '		*	
	* 4	IND TUNN	NEL (OA:	23*		*S; DEM	ONSTRATE	TH*		*		*	*		*	
	*7	")		*		*AT PRE	DICTED BL	.OC*		*		*	*		*	
	*			*		*KAGE I	NFLUENCE	0N*		*		*	*		*	
	*			*		*PROBE	FOR THE N	VA *		*		* ,	*	•	*	
	*			*		*AL TUN	NEL IS VA	LI*		*		*	*		*	
	*			*		*D		*		*		*	*		*	
	*			*		*		*		*		*	*		*	
					OC9E44F9M16N28I					*0.6		*ROCKWELL/		•		
					8W116(ORBITER)				RESSURE			*ARC -		RNATIONAL		LUME O1
115	/*E	PRESSUR	RE LOADS	S *		*IGH AL	PHA/BETA	CO*		*		*11-FOOT TRANS				N., 198
OA149A	*5	SPACE SHU	JTTLE OI	₹8*		*MBINAT	IONS FOR	*		*		*NIC WIND TUNN		. INTERNATION	A *	
CR-151,7	79*1	TER MODE	EL (47-0))*		*MACH R	ANGE 0.6	TO *		*	•	*L (UNITARY)			*	
	*]	N THE NA	ASA/ARC	*		*1.4		*		*		*		MULKEY	*	
		JNITARY F	LAN WI	√D *		*		*		*		*		1. MANN	*	
	*1	UNNEL		*		*		*		*		*	*-DMS	6	*	
	*			*		*		*		*		*	*		*	

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								,									
			 -		WIND	TUNNEL TEST	· /	DMS DATA	PROCES	SING	-					2:2	287
													- 				
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*MODEL	SCALE	* F*	TESTING	*	COGNIZANT TEST DMS	* *P!!	BASIC Blicatio	าพร
ID	*	REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH			AGENCY	*	PERSONNEL		COMMENT	_
C				70C9E44F9M16N28R					*0.6	•				CHEE/ROCKWELL			6
TWT				V8W116(ORBITER)		_		PRESSURE	*1.4		*AR			TERNATIONAL		LUME 02	
5 149A	•	PRESSURE LOADS PACE SHUTTLE OR				ALPHA/BETA NATIONS FOR	*		*					MARROQUIN/ROC LL INTERNATION		N., 19	980
		TER MODEL (47-0				RANGE 0.6			*				* W C	LL INTERNATION	IA *		
		N THE NASA/ARC			*1.4		*		*		*			L. MULKEY	*		
		NITARY PLAN WIN			*		*		*		*			M. MANN	*		
	*T	UNNEL	*		*		*		*		*		*-D	MS	*		
	*		*		*		*		*		*		*		*		
3				70C9E44F9M16N28R			•		*0.6	-		•		CHEE/ROCKWELL		-	6
WT				V8W116(ORBITER)				PRESSURE	*1.4		*AR			TERNATIONAL		LUME 03	
5 149A		PRESSURE LOADS				ALPHA/BETA			*					MARROQUIN/ROC		N., 19	980
	_	PACE SHUTTLE OR TER MODEL (47-0				NATIONS FOR H RANGE 0.6	* TO+		-				*WC *L	LL INTERNATION	A +		
151,7		N THE NASA/ARC			*1.4	I KANGE U.U	*		*		*			L. MULKEY	*		
		NITARY PLAN WIN			*		*		*		*			M. MANN	*		
		UNNEL	*		*		*		*		*		*-D		*		
	*		*		*		*		*		*		*		*		
		ESULTS OF TESTS				TEST OBJECT		ORCE	*0.01	/	*R0	CKWELL/	∗P.	J. HAWTHORNE,	R*DM	S-DR-237	/ 7
WT				RB - MODIFIED VE					*.60	-	*AR	-		SPANGLER /RI		LUME 01	
3-1		SPACE SHUTTLE				VIDUAL COMP			*1.40					J. BROWNSON /A	R*AP	RIL, 19	182
44		N THE NASA/AMES		- MODIFIED VEHI					*			C WIND TUNNE	-	W LICDORY	*		
107,3		ESEARCH CENTER		-		INGE MOMENT AND THE EFFE			*		*_	•		W.HERSEY W. KLUG	*		
		1X11 FOOT TRANS				SEALING TH			*		*		* - D		*		
		IC WIND TUNNEL.	_			RIC WING GAP			*		*		*	-1-0	*		
		ODEL 72-OTS TES				MPONENT LOA			*		*		*		*		
	* I :	A144	*		*		*		*		*		*		*		
	*		*		*		*		*	_	*	_	*		*		
;		ESULTS OF TESTS				TEST OBJECT		ORCE	*0.01							S-DR-237	7
TWT				RB - MODIFIED VE					*.60	-	*AR	_		SPANGLER /RI		LUME 02	
I-1 44		SPACE SHUTTLE				VIDUAL COMP			*1.40					J. BROWNSON /A	R*AP	RIL, 19	82
		N THE NASA/AMES		- MODIFIED VEHI		NGE MOMENT			*			C WIND TUNNE (UNITARY)		d UEDCEV	*		
.07,3	_	ESEARCH CENTER		· - -		INGE MUMENT		•	*		*	•		W.HERSEY W. KLUG	*		
		1X11 FOOT TRANS				SEALING TH			*		*		+ G . * - D		*		
		IC WIND TUNNEL.				RIC WING GAP			*		*		*		*		
		ODEL 72-OTS TES				MPONENT LOA			*		*		*		*		
		A 144	*		*		*		*		*		*		*		
	*				_		_		_		-		-4-				

							WIND	TUNNEL	TEST /	/ [MS DATA	PROCE	SSING						288
	*			*			*			*		*MODE	 L	· *		*	COGNIZANT	*	BASIC
TEST	*			*	CONI	FIGURATIONS	*	TES1	•	*	TYPE OF	*	SCALE	* TE	ESTING	*	TEST DMS	*PUE	BLICATIONS
ID	*	REPORT	TITLE	*		TESTED	*	PURPOS	iΕ	*	TEST	*MACH	RANGE	* A(SENCY	*	PERSONNEL	*OR	COMMENTS
RC	- *0	FCIII TC	OF AN IN	1\/ = M	UDEI	112-T	*DETE	RMINE F	DECCIII	D×EC	DCE	*	n 25 :	*DUC!	CWELL/	*D	H.SPANGLER,	.i M∗DM°	S-DR-2378
1TWT			ON OF ST		UDEL	112-1					ESSURE						ROQUIN. M.E.		
12-1	-	-	DYNAMIC					ND AND F				* 0.			FOOT TRAN			*	
A 191			DISTRIBU					R PIPES				* 1.					C.MONFORT, F	2.R.*	
-			EXTERNAL					RESENCE				*					LINGTON/ARC	*	
,			TUBERANC					PLATE F				*		*	,		R. HOULIHA	J *	
			11-F00T					NG LO2				*		*		_	W. KLUG	*	
			HE NASA/					O2 PRES				*		*		*-D	MS	*	
			RY PLAN					LO2 AN				*		*		*		*	
			EL (IA19					INE AND				*		*		*		*	
	*)		*				AT VAI				*		*		*		*	
	*			*				FLOW A				*		*		*		*	
	*			*				ALSO DE				*		*		*		*	
	*			*				NAMIC I				*		*		*		*	
	*			*				T AROUNI				*		*		*		*	
	*		•	*			*AME	ARRAY.		*		*		*		*		*	
	*			*			*			*		*		*		*		*	
RC	- *F	RESULTS	OF AN IN	\V*B	75C1	6E64F16FD3F	R*VER	IFY ORB	TER V	E*F0	DRCE	*0.6	-	*ROC	KWELL/	*R.	H. MULFING	R/R+DM	S-DR-2380
1TWT						M52N108N109						*1.4		*ARC	-	*DC	KWELL INTER	OV*ITAN	LUME 01
18-1	/ *]	TFY SHU1	TLE ORBI	T + 1	10N1	11R20V27VT1	O*AMI	CHAR	VITH R	E*	_	*		*11-	FOOT TRAN	150 + 0N	AL SPACE DI	/ISI *DE	C., 198
A 145A	*E	ER VEHIC	LE 102	*V	T11V	T 12VT 13VT 14	*GARI) TO: (1)BASI	C*		*		*NIC	WIND TUN	NE *ON		*	
R-151,	801*	AERO CHA	RACTERIS	ST*V	T15V	T16VT17W131	*STAI	BILITY	AND CO	N*		*		*L (UNITARY)	*M.	M. MANN	*	
	*]	ICS UTIL	IZING AN	*			*TRO	L(2)CON	FROL S	U*		*		*		*-D	MS	*	
	.	.05-SCAL	E HI-FIC	E			*RFA	CE HING	E MOME	N*		*		*		*		*	
	* [LITY REM	NOTE	*			*TS(3)REYNO	LDS	*		*		*		*		*	
	(CONTROL	MODEL (3	39			*NUM	BER EFF	ECTS(4)*		*		*		*		*	
	* -	-0) IN 1	THE AMES	R*			*HYS	TERESIS	AND C	0*		*		*		*		*	
	[ESEARCH	CENTER L	JN			*NTR	DL SURF.	ACE IN	T *		*		*		*		*	
	*	ITARY WI	IND TUNNE	EL*			*ERA	CTIONS(5)	*		*		*		*		*	
	*((OA145A	Ŀ	*				POSED II		•		*		*		*		*	
	*			*				BOARD E		-		*		*		*		*	
	*			*				RACTION	MATH	M*		*		*		*		*	
	*			*			*ODE	L		*		*		*		*		*	
	*			*			*			*		*		*		*		*	

					WIND T	UNNEL TEST	/	DMS DATA	PROCES	SSING					289
									*MODE	 1		<u>-</u>	COGNIZANT	* BAS	
TEST ID	*	REPORT TITLE	*	CONFIGURATIONS TESTED		TEST PURPOSE	*	TYPE OF TEST	*	SCALE	* TESTING * AGENCY	*]	EST DMS	*PUBLICA *OR COM	ATIONS
NDC	_ +D	ECHITC OF AN I	811.7.± E	750465645465095	+VED1E	v obetten	VETE	ODCE	+0 6	_	*BOCKMELL /	*D L	I. MULFINGER/R	+nuc_np	-2200
				375C 16E64F 16FD3FR 22HG 1M52N 108N 109N					*0.6 *1.4		*ROCKWELL/ *ARC -		ELL INTERNATI		
118-1				110N111R20V27VT10				RESSORE	*		*11-FOOT TRANSC				
DA 145A	• -			/T11VT12VT13VT14					*		*NIC WIND TUNNE			*	
CR-151,8				/T15VT16VT17W131					*		*L (UNITARY)	*M. N	A. MANN	*	
	* I	CS UTILIZING A	N *		*TROL(2)CONTROL	SU*		*		*	*-DMS	;	*	
	.	O5-SCALE HI-FI	DE		*RFACE	HINGE MOM	EN*		*		*	*	•	*	
	-	ITY REMOTE	*			REYNOLDS	*		*		*	*	;	* .	
		ONTROL MODEL (R EFFECTS(*		*	*	:	*	-
		O) IN THE AMES				RESIS AND			*		*	*	:	*	
		SEARCH CENTER			_	SURFACE I			*		*	*	1	*	
		TARY WIND TUNN	LL*			IONS(5)	* n/*		*		*	*	;	*	
	*!	OA 145A	*			SED INBOAR ARD ELEVON			*		*	*	•	* •	
	*					CTION MATH	_		-		*	-		-	
			·		*ODEL	CITON MAIN	M *		*		*	*		≁	
	*		*		*		*		*		*	*		*	
ARC	- *R	ESULTS OF AN I	NV *E	375C16E64F16FD3FR	*VERIF	Y ORBITER	VE∗F	ORCE	*0.6	_	*ROCKWELL/	*R. H	. MULFINGER/R	*DMS-DR	-2380
				2HG1M52N108N109N					*1.4		*ARC -		ELL INTERNATI		
118-1				10N111R20V27VT10					*		*11-FOOT TRANSC				1980
DA 145A	*E	R VEHICLE 102	*\	T11VT12VT13VT14	*GARD	TO: (1)BAS	IC*		*		*NIC WIND TUNNE	*ON		*	
CR-151,8	03*A	ERO CHARACTERI	ST*V	/T15VT16VT17W131	*STABI	LITY AND C	ON*		*		*L (UNITARY)	*M. N	I. MANN	*	
	* I	CS UTILIZING A	N *		*TROL(2)CONTROL	SU*		*		*	*-DMS	;	*	
	.	05-SCALE HI-FI	DE		*RFACE	HINGE MOM	EN*		*		*	*	1	*	
	-	ITY REMOTE	*		- • •		*		*		*	*	•	*	
		ONTROL MODEL (R EFFECTS(•		*		*	*	:	*	
		O) IN THE AMES				RESIS AND	_		*		*	*	1	*	
		SEARCH CENTER				SURFACE I			*		*	*	•	*	
		TARY WIND TUNN	EL*			IONS(5)	*		*		*	*	,		
	*(OA 145A	*			SED INBOAR	- •		*		*	*	1	#	
	*		*			ARD ELEVON			# _		*	*		.	
	-		*		*NIEKA	CTION MATH	ΜŦ		*		÷	*	,	.	
	-		•		-0066		-		-		-		•		

							WIND	TUNNEL	TEST	/	DMS DATA	PROCES	SING						290
TEST ID	*	REPORT	TITLE	* *	CON	FIGURATIONS TESTED	*	TEST PURPOS			TYPE OF TEST		SCALE	* * TESTING * AGENCY	* *	COGNIZANT TEST DMS PERSONNEL	*P(IC ATIONS MENTS
RC 1TWT						6E64F16FD3FF M52N108N109N						*0.6		*ROCKWELL/ *ARC -		H. MULFINGER KWELL INTERNA	•		
18-1						1 1R20V27VT 10					KESSORE	* 1. -4		*11-FOOT TRANS					
145A						T12VT13VT14						*		*NIC WIND TUNN			*		
151,8					T 15V	T16VT17W131	*STAE	ILITY A	ND CC	N*		*	:	*L (UNITARY)		M. MANN	*		
			IZING AN					(2)CON1				*		*	*-DI	MS	*		
		.05-SCAL LITY REM	E HI-FID	E*				E HINGE		*N		*		*	*		*		
			MODEL (3					B)REYNOL BER EFFE				*		+ ≠	*		*		
			HE AMES	_				ERESIS		•		*		*	*		*		
			CENTER U					L SURFA				*		*	*		*		
	*	ITARY WI	ND TUNNE	L*			*ERAC	TIONS(5)	*		*		*	*		*		
	*	(DA 145A		*				OSED IN		•		*		*	*		*		
	*			*				OARD EL				*		*	*		*		
	*			*				RACTION	MATH	M*		*		*	*		*		
	*			*			*ODEL	•		*		*		*	*		*		
C	- *	DESIII TS	OF AN IN	× V≠₽	7504	6E64F16FD3FI		EV ODR	TED 1	 'E∗E	ODCE	* *0.6	-	* *ROCKWELL/	*D	H. MULFINGER	ית∗ם/ס	นร-ทอ	-2380
TWT						M52N108N109						*1.4		*ARC -		KWELL INTERNA		-	
18-1						11R20V27VT10						*		*11-FOOT TRANS	0+0N	AL SPACE DIVI	SI*D	EC.,	198
145A	*	ER VEHIC	LE 102	*V	T11V	T12VT13VT14	*GARE) TO: (1)BAŞI	C*		*		*NIC WIND TUNN	E*ON		*		
151,8					T15V	T16VT17W131						*		*L (UNITARY)		M. MANN	*		
			IZING AN					(2)CON				*		*	*-DI	MS	*		
			E HI-FID	_				E HINGE				*		*	*		*		
		LITY REM	MODEL (3	*			•	B)REYNOU BER EFFU	-	*		*		*	*		*		
			HE AMES					ERESIS				*		*	*		*		
			CENTER U					L SURF	-			*		*	*		*		
	*	ITARY WI	ND TUNNE	L*				TIONS(_	*		*		*	* '		*		
	*	(DA 145A		*			*PROF	OSED I	NBOARD	/*		*		*	.*		*		
	*			*				BOARD E				*		*	*		*		
	*			*				RACTION	MATH	M*		*		*	*		*		
	*			*			+ODEI	-		*		*		*	*		*		
	*			7			*			*		*		-	*		*		

)))
				WIND T	UNNEL TE	ST /	DMS DAT	A PROCE	SSING					291
TEST ID	* * * * REPORT TITLE	*	CONFIGURATIONS TESTED		TEST PURPOSE	* * *	TYPE O		SCALE		* * 1	COGNIZANT TEST DMS PERSONNEL	* BAS *PUBLIC *OR COM	ATIONS
	- *RESULTS OF AN							*0.6		*ROCKWELL/		I. MULFINGER/R		
	- *ESTIGATION TO				-			*1.4		*ARC -		VELL INTERNATI		06
8-1	/*IFY SHUTTLE OR							*		*11-FOOT TRANSO		. SPACE DIVISI	*DEC.,	1980
145A	*ER VEHICLE 102		VT 1 1VT 12VT 13VT 14					*		*NIC WIND TUNNE			*	
-151,8	06*AERO CHARACTER		VT 15VT 16VT 17W131					*	,	*L (UNITARY)		I. MANN	*	
	*ICS UTILIZING			•	2)CONTRO			*	,	*	*-DMS	i	*	
	.05-SCALE HI-F	IDE			HINGE M			*	•	*	*		*	
	*LITY REMOTE	*			REYNOLDS			*	1		*		*	
	*CONTROL MODEL	•			R EFFECT			*	,	*	*		*	
	*-O) IN THE AME				RESIS AN			*			*		*	,
	*ESEARCH CENTER				SURFACE	INIT		*	•		*		*	
	ITARY WIND TUN	NEL			IONS(5)	*		*			*		*	
	*(OA145A	*			SED INBO	•		*	•	.	*		*	
	.	*	•		ARD ELEV			*	*		*		*	
	I	*			CTION MA	IH M∓		*			*		*	
	1	*		*ODEL		*		*			*		*	
c	- *	Ξ.	TECT CANCELLED C	* C+TCCT	CANCELLE	D 654	FORCE	*			* ~ ~	MCDONALD	*DUC DD	0004
rc PT	- *		FEST CANCELLED S PTEMBER 1978		CANCELLE ER 1978	י אבר עו	FURCE	*		LARC - /			*DMS-DR	_
0 .	- - /*		- IEMDEK 1978	*P1EMD	EK 1978			-		LARC -	* - DMS)	*JUNE,	1983
107	/ *	-								*8-FOOT TRANSON *IC PRESSURE TU			∓	
	*	*		*		-		*		NNEL	*		-	
	*	*		<u>.</u>				•		k -1414EF	_		-	
FC	- *RESULTS OF EXP	PDT ±1	ADDEL 25-D (VEH	*TO DE	TEDMINE	2010 #1	UEAT_TDA	15+0 04		MSFC /	+W 6	. GARTON/RI	+ +DMS-DR	-1202
	- *MENTAL TESTS I						ILAI IKA	*	•	MSFC -		•	*NOV.,	1977
7	/*HE NASA/MSFC I							*		NASA/MSFC IMPU	-		*	1377
8			MULATION SYS.)		SSURE DI			*		LSE BASE FLOW			*	
109	*ILITY ON A SPA				NS RESUL			*		FACILITY	*		· *	
	B2*SHUTTLE .04 SC				ENGINE P			*		k	*		*	
, , _	*ORBITER (MODEL				IRCULATI			*	,	k	*	:	*	
	*5-0) TO DETERM				RECT PLU			*		k	*		*	
	*SECOND STAGE A			*MPING		*		*		k	*		*	
	*ENT BASE HEATI			*		*		*	*	k	*	,	*	
	*RATES AND PRES			*		*		*		k	*	:	*	
	*E DISTRIBUTION			*		*		*	4	k	*	:	*	
	*	*	·	*		*		*	*	k	*	:	*	

					WIND	TUNNEL TE	ST /	DMS DATA	PROCES	SSING						292
	*		*		*		*		*MODEL	 _	*	*	COGNIZANT	*	BAS	IC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*	PUBLIC.	ATIONS
ID	*	REPORT TITLE	*	TESTED	* 	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*	OR COM	MENTS
AEDC	- +D	ECILITE DE DOS	JEvo	IV102 + ET (MODEL	**O O	DTATM THE	EDAC+	EODOE	*0.011	25 /	*ROCKWELL/	*.1	.J.DAILEDA +	.l Mi*	DMS-DD	-2384
HWTB		PLUME INTERAC				EFFECTS		FORCE	*5.89	-	*AEDC -		RROQUIN/RI		VOLUME	
TOA		N TESTS USING		0 01)		HRUSTER J			*		*HYPERSONIC W				SEPT	
IA148	•	.0125-SCALE MO				S ON SSV			*		*D TUNNEL (B)			*	 ,	
	_	(70-0T) OF TH				MICS DURI			*		*	*		*		
OK 1011		PACE SHUTTLE V				NG TO SIM			*		*	*		*		
		CLE ORBITER IN				RETURN-TO			*		*	*		*		
		E AEDC VKF TU			_	SITE (RTL			*		*	*		*		
		%B% (IA148)	*			MISSION	*		*		*	*		*		
	*	,00,0 (2)	*		*		*		*		*	*		*		
AEDC	- *R	ESULTS OF RCS	JE*C	V102 + ET (MODE	L*TO 0	BTAIN INT	ERAC*	FORCE	*0.012	25 /	*ROCKWELL/	* J	.J.DAILEDA +	J.M*	DMS-DR	-2384
HWTB		PLUME INTERAC				EFFECTS			*5.89		*AEDC -		RROQUIN/RI		VOLUME	
TOA		N TESTS USING		•	*CS T	HRUSTER J	ET P*		*		*HYPERSONIC V	U*NIV	. E. VAUGHN	*	SEPT	1978
IA148	*0	.0125-SCALE MO	DDE*		*LUME	S ON SSV	AERO*		*		*D TUNNEL (B)) * -	DMS	*		
CR-151.	413*L	(70-0T) OF TH	HE *		*DYNA	MICS DURI	NG S*		*		*	*		*		
		PACE SHUTTLE				NG TO SIM			*		*	*		*		
	* I	CLE ORBITER I	N T*		*E A	RETURN-TO	-LAU*		*		*	*		*		
	H	E AEDC VKF TU	NNE		*NCH	SITE (RTL	S) A*		*		*	*		*		
	*L	%B% (IA148)	*		*BORT	MISSION	*		*		*	*		*		
	*		*		*		*		*		*	*		*		
ARC	- *R	ESULTS OF TEST	TS *N	10DEL 53-0 (ELEVI	O*TO E	VALUATE E	FFEC*	HEAT-TRAN	S*0.11	1 /	*ROCKWELL/	*C	. L. BERTHOLI)/RI*	DMS-DR	-2385
3.5HWT	- *0	N A O. 111-SCAI	LE *N	N/WING GAP)	*T OF	ELEVON D	EFLE*		*5.1	-	*ARC -	*D	.W.HERSEY	*	SEPT.,	1977
173	/*S	PACE SHUTTLE	VE*		*CTIC	ON, GAP GE	OMET*		*5.1		*3.5-F00T HY	PER*M	I. M. MOSER JI	₹. *		
OH15	*H	ICLE SIMULATE	D E*		*RY,	AND BOUND	ARY *		*		*SONIC WIND	ΓUN∗-	DMS	*	t	
CR-151,	366*L	EVON/WING GAP	HE*		*LAYE	R STATE O	N EL*		*		*NEL	*		*	:	
	* A	T TRANSFER MOI	DEL*		*EVON	N/WING GAP	HEA*	•	*		*	*		*	r.	
	*(53-0) IN THE	AM *		*TING	3	*		*		*	*		*		
	E	S RESEARCH CE	NTE		*		*		*		*	*		*	t	
	*R	3.5-FOOT HWT	*		*		*		*		*	*		*		
	*		*		*		*		*		*	*		*	· 	
ARC				MODEL 53-0 (ELEV							*ROCKWELL/		. L. BERTHOLI			
	_	N A 0.111-SCA		N/ELEVON GAP)		ELEVON D			*5.1	-	*ARC -		.W.HERSEY		SEPT.,	1977
177		PACE SHUTTLE				ON, GAP GE			*5.1		*3.5-FOOT HY			R. *	•	
OH44		CLE SIMULATED			*RY,	AND BOUND	ARY *		*		*SONIC WIND	IUN*-	DMS	*	•	
CR-151,		VON/ELEVON GAI			*		*		*		*NEL	*		*		
		AT TRANSFER M			*		*		*		*	*		*	•	
		(53-0) IN TH			*		*		*		*	*		*		
		ES RESEARCH C			*		*		*		*	*		*	r	
,		R 3.5-FOOT HY			*		*		*		*	*		*		
	5	ONIC WIND TUN	NEL		*		*		*		*	*		*		
	*		*		*		*		*		*	*		*	•	

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### ACC - RESULTS OF WIND T-MODEL 80-0 (0.04-*1)DETERMINE ORBIT-HEAT-TRANS-0.04		/							,							
TEST * CONFIGURATIONS * TEST * TYPE OF * ACALE* TESTING * TEST DNS * PUBLICATIONS TO COMMENTS * TEST DN * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * TEST DNS * PERSONNEL * OR COMMENTS * OR				- - -	-~	WIND	TUNNEL TEST		DMS DAT	A PROCE	SSING			- 		29
TEST * CONFIGURATIONS * TEST * TYPE OF * SCALE* TESTING * TEST DNS * PUBLICATIONS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * PUBLICATIONS * TEST DNS * TEST DNS * PUBLICATIONS * TEST DNS * TEST DNS * PUBLICATIONS * TEST DNS * TEST DNS * PUBLICATIONS * TEST DNS * TES											 : 1				COCNIZANT	* BASIC
LARC - *	TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE O			E*	TESTING	*		
TTPT		*	REPORT TITLE	*		*		*					AGENCY	* 	PERSONNEL	*OR COMMENTS
TTPT				. 4	TECT OWNER LED OF			c r r	ODOF				400 /		u DALI	*DMC-DD-0393
**************************************		* *						ンヒギト	UKCE	*			•			
### ### ### ### ### ### ### ### ### ##				71	TEMBER 19/8	+ PICN	DEK 19/8	.		<i>+</i>						
* *** *** *** *** *** *** *** *		*		- -		*		*		*					J	
AEDC - *RESULTS OF WIND T+MODEL 83-0 (0.04-*1)DETERMINE ORBIT*HEAT-TRANS*0.04		*		*		*		*		*				*		*
HWTB - *UNNEL TESTS OF TH*SCALE)		*		*		*		*		*		*	· L	*		*
HWTB - *UNNEL TESTS OF TH*SCALE)	DC -	*RE	SULTS OF WIND	T * N	MODEL 83-0 (0.04-	* 1) DE	TERMINE ORB	TT*1	IEAT-TRA	NS*0.04	١.	*R	OCKWELL/	*P.	L. LEMOINE/RI	*DMS-DR-2388
V41B-R4A /*IN-SKIN THERMOCOU*MODEL 60-0 (0.017*SURFACE HEATING *											· .					
***CR-167,676+0.04-SCALE) AND 6*		_								*7.90) -	*H				*
O-0 (0.0175-SCALE *IN THE AREA OF TH* *	184A	*PL	E MODELS 83-0	(*5	S-SCALE)	*0F T	URBULENT	*		*8.0		*D	TUNNEL (B)	*-DM	S	*
) OF THE SPACE SH	2-167,676	5 * 0.	O4-SCALE) AND	6*		*FLOV	ORIGINATIN	G *		*		*		*		*
*UTTLE ORBITER IN * * TERFACE * * * * * * * * * * * * * * * * * * *		*0-	O (0.0175-SCAL	.E*		*IN 1	HE AREA OF	TH*		*		*		*		*
THE AEDC VKF HYPE		•						IN*		*		*		*		*
RSONIC WIND TUNNE										*		*		*		*
*L B (OH84A) * **HEATING IN SAME * * * * * * * * * * * * * * * * * * *						-				*		*		*		*
* * * * * * * * * * * * * * * * * * *				IE*						*		*		*		*
* * * * * * * * * * * * * * * * * * *		*L	B (QH84A)	*				*		*		*		*		*
## ## ## ## ## ## ## ## ## ## ## ## ##		*		*		*AREA	•	*		*		*		*		*
## ## ## ## ## ## ## ## ## ## ## ## ##		·*	CIU TC OF 441 TA	*	750465645465565	*	EV 0007750	.	CODOR	* 0 45		*	OCKUELL /	* *D		* *
118-1											, -					
OA145C *ER VEHICLE 102 *VT11VT12VT13VT14 *GARD TO: (1)BASIC*									KESSUKE	*3.5						
CR-16O,810*AERO CHARACTERIST*VT15VT16VT17W131 *STABILITY AND CON*	•									∓					L SI'MUL DIVIS.	*
*ICS UTILIZING AN *							• •			*					MANN	*
.O5-SCALE HI-FIDE	55,510				. ,571 1071 11#101					*						*
*LITY REMOTE							• •			*		*	,	*	-	*
CONTROL MODEL (39				*				*		*		*		*		*
-O) IN THE AMES R				9+		- •		4)*		*		*		*		*
ITARY WIND TUNNEL										*		*		*		*
*(OA145C)		*ES	EARCH CENTER L	N*		*NTRC	L SURFACE I	NT*		*		*		*		*
*		*IT	ARY WIND TUNNE	L*		*ERAC	TIONS(5)	*		*		*		*		*
		*(0	A145C)	*						*		*		*		*
*		*		*		-		10*		*		*		*		*
		*		*		+N MA	TH MODEL	*		*		*		*		*

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						WIND	TUNNEL TE	ST /	DMS	DATA	PROCE	SSING					294
	*			*		*			. 		*MODE	L *	*	*	COGNIZANT	* BAS	SIC
TEST	*			*	CONFIGURATIONS		TEST			E OF		SCALE:		*	TEST DMS	*PUBLIC	
ID	* 	REPORT	TITLE	*	TESTED	* 	PURPOSE		· TE	ST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
	_		_ _											_		.	
RC					75C16E64F16FD3F						*2.45		*ROCKWELL/		H. MULFINGER		
17SWT 18 - 1					2HG 1M52N 108N 109					UKE	*3.5		*ARC -		KWELL INTERNA AL SPACE DIVI		1981
145C		R VEHIC			10N111R20V27VT1 F11VT12VT13VT14						-		*OT SUPERSON			SI TOUNE,	190
					115VT16VT17W131						*		*WIND TUNNEL			*	
		CS UTIL					(2)CONTRO				*		*NITARY)	*-D		*	
		05-SCALI					E HINGE M	-			*	,	*	*		*	
		ITY REM		*)REYNOLDS		*		*	,	*	*		*	
•	*(ONTROL I	MODEL (39*			ER EFFECT		*		*	,	*	*		*	
	-	0) IN T	HE AMES	R		*HYST	ERESIS AN	D CO	*		*		*	*		*	
	* E	SEARCH (CENTER	UN*		*NTRO	L SURFACE	INT	*		*		*	*		*	
		TARY WI	ND TUNN	IEL*		*ERAC	TIONS(5)		*		*	,	*	*		*	
	* ((OA145C)		*			OSED INBO				*	•	*	*		*	
	*			*			ON INTERA	CTIO	*		*	:	*	*		*	
	*			*		*N MA	TH MODEL		*		*	,	*	*		*	
	*	SECULTS A	OF 441 1	*	750465645465505	*	ODDITE	5 V.F	* 		*		*	*		* -/D+DMC D	
ARC 375WT					75C16E64F16FD3F						*2.45		*ROCKWELL/		H. MULFINGER	•	
118-1					2HG1M52N108N109 10N111R20V27VT1					UKE	*3.5		*ARC -		KWELL INTERNA IAL SPACE DIVI		
DA 145C	-	R VEHIC			T11VT12VT13VT14						- -		*OT SUPERSON			*	130
					T 15VT 16VT 17W131						*		*WIND TUNNEL			*	
		CS UTIL			. ,		(2)CONTRO				*		*NITARY)	*-C		*	
		05-SCAL					E HINGE M				*	:	*	*		*	
	*[ITY REM	OTE	*)REYNOLDS		* .		*	1	*	*		*	
	(CONTROL	MODEL ((39		*NUME	ER EFFECT	S(4)	*		*	:	*	*		*	
		-0) IN T				*HYS1	ERESIS AN	D CO	*		*		*	*		*	
		SEARCH					L SURFACE	INT	*		*	:	*	*		*	
		TARY WI		VEL*			TIONS(5)		*		*	:	*	*		*	
	*((DA145C)		*			OSED INBO				*		*	*		*	
	*			*			ON INTERA	CTIO	*		*		*	*		*	
	*			*		*N MA	TH MODEL		∓ 		*		Ŧ 	*		*	
	*			*		₹			*		*	:	+	*		*	

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×.) .)		·		Ź
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			295
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* * TEST * PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
WT 94 101	- *LOW SUPERSONIC S - *ABILITY AND CONTI /*OL CHARACTERISTI *S OF A O.0015-SC. 81*LE (REMOTELY CON *ROLLED ELEVON) MI *DEL 44-O SPACE SI *UTTLE ORBITER TE: *TED IN THE NASA/ *ARC 4 FOOT UPWT *LEG 1) (LA101) * *	R*BITER WITH REMOTE C*CONTROLLED ELEVO A*NS F* O* H* S*	E+ONIC DATA ON CON	T	* 0.015 / *1.5 - *2.86 * * * * * * * * * *	*LARC -	*BERNARD SPENCER, *JR./LARC N*GEORGE M. WARE/N/ *SA *J. W. BALL *G. G. MCDONALD *-DMS * * * * * * * * * * * * * * * * * * *	*JUNE, 1980
PT 9 244	46+IN THE LANGLEY R	E*G IN ORBITER *OTS - ET AND SRB *ON SEPERATE STING E*OTS - ATTACH STRIF E*CTURE ON TANK ONI E*Y)*	*THIS TEST WAS TO *OBTAIN ORBITER/E G*ATTACH STRUCTURE	* *FORCE * * * * * * * * * *	*0.6 - *1.195 *	* ** *ROCKWELL/ *LARC - *8-FOOT TRANSON *IC PRESSURE TU *NNEL * * * *	* ** *P.J. HAWTHORNE, F *.SPANGLER /RI *.SPANGLER /RI *D.WARC *D.W.HERSEY *G. W. KLUG *-DMS * *	* * **********************************
WT 5 250	* - *GROUND PROXIMITY - *TESTS OF THE O.O: /*-SCALE MODEL (45- *O) SPACE SHUTTLE 89*ORBITER IN THE RO *CKWELL INTERNATIO *NAL NAAL LOW SPEON *D WIND TUNNEL * *	3*40A/B CONF. (MOD: -*FIED) * 3* 3*		L*; I*; X* I* E* -*	* .20- * .20	* *ROCKWELL/ *NRLAD - *LOW SPEED WIND * * * * * * * * * * *	* *R. MENNELL/RI *J. E. VAUGHN 0*M. M. MOSER JR. * * * * * * * * * * *	* *DMS-DR-2392 *DEC., 1977 * * * * * * * * *

						WIND	TUNNEL	TEST /	DM	IS DATA	PROCE	SSING						296
	*			*		*			*		*MODE	 L	*	*		OGNIZANT	* BAS	IC
TEST				*	CONFIGURATIO	INS *	TES	Ť	* 1	YPE OF	*	SCALE	* TESTIN	G *	TE	ST DMS	*PUBLIC	ATIONS
ID	*	REPORT	TITLE	* ·	TESTED	*	PURPO	SE	* 	TEST	*MACH	RANGE	* AGENCY	*	р 	ERSONNEL	*OR COM	MENTS
ARC	- *D	ESILITS O	ne ssv t	N*OT	FLAT PLATE	****	ORTAIN	A EDODVA	J±HE/	\T-TDAN	s* n n	4 /	*ROCKWELL	/ *C	. ,	BERTHOLD/RI	r + DMS - DR	-2393
3.5HWT		ERFERENC			I LAI FLAIL		C INTER			II INAN	* 5.	•	*ARC	•		LEMOINE/RI		
		TESTS O				–	TING EF		-		*		*3.5-F00T				*FEB	
IH51A		SCALE TH					THE UPP				*		*SONIC WI				*	
		HERMOCOU	-				OF THE				*		*NEL		DMS		*	
		(58-OT)				*SHU					*		*	*			*	
		G A SIMU			•		K (ET)				*		*	*			*	
		ERNAL TA					SENCE C				*		*	*			*	
7		TER FORE					TER FOR				*		*	*			*	
	T	HE NASA/	ARC 3.5	-		*FOR	WARD AT	TACH H	*		*		*	*			*	
	, *F	OOT HYPE	RSONIC	W*		*ARD	WARE		*		*		*	*			*	
	* I	ND TUNNE	L (IH51	A *		*			*		*		*	*			*	
	*)			*		*			*		*		*	*			*	
	*			*		*			*		*		*	*			*	
ARC	- *R	ESULTS 0	F SSV I	N+OT	FLAT PLATE	*TO	OBTAIN	AERODY	4+HE	AT-TRAN	S* 0.0	4 /	*ROCKWELL	/ *C.	. L.	BERTHOLD/RI	I +DMS-DR	-2393
3.5HWT	- * T	ERFERENC	CE HEATI	N*		*AMI	C INTER	FERENCE	E*		* 5.	3	*ARC			LEMOINE/RI		
228-1	/*G	TESTS O	O.O A O.O	4*		*HEA	TING EF	FECTS	*		*		*3.5-F00T				*FEB.,	1984
I H5 1 A	*-	SCALE TH	IIN-SKIN	*			THE UPF		-		*		*SONIC WI			KLUG	*	
CR-167,		HERMOCOU					OF THE	-			*		*NEL	*-[DMS		*	
		(58-OT)					TTLE EX				*		*	*			*	
		G A SIMU				/AT*	K (ET)	IN THE	*		*		*	*			*	
		ERNAL TA		_			SENCE C				*		*	*			*	
		TER FORE					TER FOR		_		*		*	*			*	
		HE NASA/					WARD AT	TACH H	*		*		*	*			*	
		OOT HYPE				*ARC	WARE		*		*		*	*			*	
	* I	ND TUNNE	EL (IH51	Δ*		*			*		*		*	*			*	
	*)			*		*			*		*		*	*			*	
	*			*		*			*		*		*	*			*	

REPORT TITLE ** TESTED ** PURPOSE ** TEST **MACH RANGE AGENCY ** PERSONNEL **OR COMMENTS** - *RESULTS OF SSV IN*OT FLAT PLATE **TO OBTAIN AERODYN*HEAT-TRANS** O.O4 /* *ROCKWELL/ **C. L. BERTHOLD/RI*DMS-DR-2393 *ARC - **P. L. LEMOINE/RI **VOLUME O3 *ARC - **P. L. LEMOINE/RI **VOLUME O3 **ASCALE THIN-SKIN ** **ON THE UPPER PORT* ** *SONIC WIND TUNG, W. KLUG **SONIC WIND TUNG, W. **SONIC WIND TUNG, W. KLUG **SONIC WIND T	,))	

**************************************	297				SING	PROCE	DMS DATA	L TEST /	WIND TUN						
**************************************	* BASIC	COGNIZANT	*		. 4	*MODE		*	*		k	*		*	
## AMIC INTERFERENCE			*	_								* * TITLE	REPORT	* *	TEST
## AMIC INTERFERENCE				2001415111				45000VII.	. TO ODT1	T DI 475			.F.C.II		
					•		EAI TIRAN			I PLAIE			-		C
SCALE THIN-SKIN * **ON THE UPPER PORT* ** **SONIC WIND TUN*G. W. KLUG ** *17.681**********************************						≁ j.									28-1
ST,681*THERMOCQUPLE MODE*	*rcb., 1984					+		_							51A
L (58-07) UTILIZI *SHUTTLE EXTERNAL * * * * * * * * * * * * * * * * * * *	±					-									
**NG A SIMULATED EX*	*	13	4 - DM	ACL	-	*									107,0
TERNAL TANK & ORB	*		<u>.</u>			*									
*ITER FOREBODY IN * *THE NASA/ARC 3.5-* *FOOT HYPERSONIC W* *ARDWARE ** ** ** ** ** ** ** ** **	*		*		•	*									
THE NASA/ARC 3.5-	*		*			*									
FOOT HYPERSONIC W ** *IND TUNNEL (IH51A* * * * * * * * * * * * * * * * * * *	*		*		*	*									
* TND TUNNEL (1H51A*	*		*		*	*		*							
*	*		*		*	*		*							
#T - *TERFERENCE HEATIN*	*		*		*	*		*	*		t	*			
#T - *TERFERENCE HEATIN*	* .		*		*	*		*	*			*		*	
	*DMS-DR-2393	L. BERTHOLD/RI	*C.	ROCKWELL/	/ *	S* 0.0	EAT-TRAN	AERODYN*I	*TO OBTAI	T PLATE	OT F	SSV IN*	RESULTS O	- *	
SCALE THIN-SKIN * * *** *** *** *** *** *** *** ***	*VOLUME 04	L. LEMOINE/RI	*P.	ARC -	}	* 5.		RFERENCE*	*AMIC INT			E HEATIN+	ERFERENC	- *	HWT
## STOREST STORES ## STORE	*FEB., 1984	L. MULKEY	HYPER*T.	3.5-FOOT H		*		FFECTS *	*HEATING		t	N A O.04*	TESTS OF	/*	- 1
L (58-OT) UTILIZI	*	W. KLUG	TUN*G.	SONIC WIND	*	*		PER PORT*	*ON THE L		¢	IN-SKIN *	SCALE TH	*	14
NG A SIMULATED EX	*	AS	*-DM	NEL	*	*		E SPACE *	*ION OF T		•	PLE MODE*	HERMOCOU	682*	167,6
TERNAL TANK & ORB	*		*		*	*		XTERNAL *	*SHUTTLE		r	UTILIZI*	(58-OT)	*	
*ITER FOREBODY IN *	*		*			*		IN THE *	*TANK (ET		•	ATED EX*	IG A SIMU	*	
THE NASA/ARC 3.5- *FORWARD ATTACH H * *FOOT HYPERSONIC W* *ARDWARE * * * * * * * * * * * * * * * * * * *	*		*		*	*		OF THE O*	*PRESENCE			NK & ORB*	ERNAL TA	*	
FOOT HYPERSONIC W	*		*		*	*		REBODY &*	*RBITER F		•	BODY IN *	TER FORE	*	
FOOT HYPERSONIC W	*		*		*	*		TTACH H *	*FORWARD		•	ARC 3.5-*	HE NASA/	*	
*)	*	•	*		*	*		*	*ARDWARE			RSONIC W*	OOT HYPE	*	
* * * * * * * * * * * * * * * * * * *	*		*		*	*		*	*		r	. (IH51A*	ND TUNNE	*	
- *OD ON THE TRANSON*POD)	*		*		*	*		*	*		1	*		*	
- *OD ON THE TRANSON*POD)	*		*		*	*		*	*		1	*	-	*	
/*IC AERODYNAMIC CH*	*DMS-DR-2395	•		LARC /	•		ORCE			44-0 (SILTS					C
1 *ARACTERISTICS OF * *ITER RESULTING FR* * *IC PRESSURE TU*-DMS * 51,394*A O.O15-SCALE SHU* *OM ADDITION OF SI* * *NNEL * * *TTLE ORBITER MODE* *LTS POD TO VERTIC* * * * * *L (44-0) TESTED I* *AL TAIL * * * * * *N THE NASA/LARC 8* * * * * * * *	*JAN., 1978														T
51,394*A O.O15-SCALE SHU* *OM ADDITION OF SI* * *NNEL * * *TTLE ORBITER MODE* *LTS POD TO VERTIC* * * * *L (44-0) TESTED I* *AL TAIL * * * * *N THE NASA/LARC 8* * * * * * *	*					*1.20									
TTLE ORBITER MODE	*	IS	RE TU*-DM			*							_		11
L (44-0) TESTED I	*		*	NNEL	*	*							-		151,3
N THE NASA/LARC 8	*		*		*	*		O VERTIC*							
	*		*		*	*		*	*AL TAIL						
*-ruu ipi	*		*		*	*		*	*			A/LARC 8*			
	*		*		*	*		*	*		•	*	FOOT TPT	*	

		WIN	D TUNNEL TEST	/ DMS DATA	PROCESSING	3		298
* TEST * ID * REPORT TITL		# IGURATIONS * TESTED *	TEST PURPOSE	* * TYPE OF * TEST	*MODEL * SCAL *MACH RANG	* LE* TESTING SE* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
C - *EFFECT OF SIL	TC D+MODEL	44-0 (ETLTE+TO	DETERMINE FEE	E+E0DCE	*0.015 /	/ *I ADC /	*G. WARE, B. SPE	NC+DNC-DD-2206
IT - *OD ON THE LOW			OF AERO. CHAR		*0.015 /	*LARC -	*ER. JR./LARC	*DEC 1977
2 /*ERSONIC AEROL			ERISTICS OF OR		*1.5 *2.5		W+G. G. MCDONALD	*
10 *IC CHARACTERI			ER RESULTING F		*	*IND TUNNEL	*-DMS	*
151,393*S OF A 0.015-			ADDITION OF S		*	*	*	*
*E SHUTTLE ORE			S POD TO VERTI		*	*	*	*
*MODEL (44-0)			TAIL	*	*	*	*	*
*TED IN THE NA		*		*	*	*	*	*
*ARC 4-FOOT UP		*		*	*	*	*	*
*LEG 1)	*	*		*	*	*	*	*
*	*	*		*	*	*	*	*
C - *RESULTS OF WI	ND T+0 -140	A/B/C/R *TH	E PURPOSE OF T	H*FORCE	*0.01	/ *LARC /	*DELMA C. FREEMA	N.*DMS-DR-2397
T - *UNNEL TESTS C					*.9 -	*LARC -		
/*0.010 SCALE N			FY RESULTS OF	1	*.9	*8-FOOT TRANS	ON+ARC	*
113 *(72-0TS) ROCK	WEL *S -MOD	IFIED VEHIC*AR	LIER TESTS (IA	2*	*	*IC PRESSURE	TU∗J. W. BALL	*
-167,347*L SPACE SHUTT	LE V*LE 5	*44) OF THE 72-OT	S*	*	*NNEL	∗G. W. KLUG	*
EHICLE IN THE	LAR	*M0	DEL IN THE SAM	_ *	*	*	*-DMS	*
*C 8-FOOT TRAN	SONI *	*E	TUNNEL.	*	*	*	*	*
C PRESSURE TU	NNEL	*		*	*	*	*	*
*(LA113)	*	* .		*	*	*	*	*
*	*	*		*	* '	*	*	*
C - *RESULTS OF TE	STS *B62C9E	64W131M16N2*T0	OBTAIN AERODY	N*FORCE	*0.03	/ *ROCKWELL/	*R.H.SPANGLER/RI	*DMS-DR-2398
116T - *USING A 0.03	SCAL*8N112R	5V8FD3F9 *AM	IC LOADS ON AL	L*PRESSURE	*0.6 -	*AEDC -	*L.P.LEBLANC/RI	*VOLUME 01
) /*E MODEL (47-0			HICLE ELEMENTS		*1.55		ROP*S. R. HOULIHAN	*NOV., 1981
IOSA *OF THE SPACE	SHUT*S27	*BY	PRESSURE INTE	*	*		TU∗G. W. KLUG	*
·160,850*TLE INTEGRATE		*GR	ATION AND MEAS	U*	*	*NNEL (PWT-16	ST)*-DMS	*
HICLE IN THE	AEDC	*RE	LOADS DIRECTL	Υ*	*	*	*	*
*16 FOOT TRANS			I WING VERTICAL		*	*	*	*
*C PROPULSION			IL AND ELEVON	*	* :	*	*	*
*TUNNEL (IA105	A) *	*HI	NGE MOMENTS.	*	*	* ;	*	*
*	*	*		*	*	*	*	*
C - *RESULTS OF TE						/ *ROCKWELL/	*R.H.SPANGLER/RI	-
16T - *USING A 0.03			IC LOADS ON AL		*0.6 -	*AEDC -	*L.P.LEBLANC/RI	*VOLUME 02
/*E MODEL (47-0			HICLE ELEMENTS		*1.55		ROP*S. R. HOULIHAN	*NOV., 1981
105A +OF THE SPACE			PRESSURE INTE		*		TŲ∗G. W. KLUG	*
·160,851*TLE INTEGRATE	_		ATION AND MEAS		*	*NNEL (PWT-16	ST)*-DMS	*
*HICLE IN THE			LOADS DIRECTL		*	*	*	*
*16 FOOT TRANS			WING VERTICAL		*	*	*	*
*C PROPULSION			IL AND ELEVON	*	*	*	*	*
*TUNNEL (IA10	A) *	*H]	NGE MOMENTS.	*	*	*	*	*

)							`
						,							,
				WIND TUNNEL T	EST /	DMS DATA	PROCESSI	NG					299
	*			*	*		*MODEL	*		*	COGNIZANT	* BAS	c
TEST	*	4	CONFIGURATIONS	* TEST	*	TYPE OF	* SC	ALE*	TESTING	*	TEST DMS	*PUBLICA	ATIONS
ID	* REPORT	TITLE *	TESTED	* PURPOSE	*	TEST	*MACH.RA	NGE*	AGENCY	*	PERSONNEL	*OR COM	MENTS
,													
;		_	B62C9E64W131M16N2				*0.03	•	ROCKWELL/		I.SPANGLER/RI	*DMS-DR-	
16T				*AMIC LOADS OF			*0.6 -		AEDC -		P.LEBLANC/RI	*VOLUME	
	/*E MODEL (•		*VEHICLE ELEM	-		*1.55		TRANSONIC PROP			*NOV.,	1981
)5A	*OF THE SF		_	*BY PRESSURE			*		ULSION WIND TU			*	
160,8	52+TLE INTEG			*GRATION AND I			*	*	NNEL (PWT-16T)	* - DN	AS .	*	
	*HICLE IN			*RE LOADS DIR			*	*	•	*		*	
	*16 FOOT 1			*ON WING VERT		•	*	*	•	*		*	
	*C PROPULS			*TAIL AND .ELE		•	*	*	1	*		*	
	*TUNNEL (1	(A105A)		*HINGE MOMENTS	s. *	L	*	*	•	*		*	
	*	. 671.76 8		*	*		*	, *		*		*	
C			MODEL 44-0 (SILTS				*0.015	•	LARC /		WARE, B. SPEN		
<u> </u>	- *OD ON THE		•	*CT OF AERO.			*3.0 -		LARC -		JR./LARC	*NOV.,	1977
7	/*PERSONIC			*CTERISTICS OF			*4.63				G. MCDONALD	*	
14	*MIC CHARA			*ITER RESULTII			*	*	IND TUNNEL	*-DN	45	*	
151,3	88*CS OF A C			*OM ADDITION (*			*		∓	
	*LE SHUTTL			*LTS POD TO VI	KIIC*	•	*	*		*		*	
	*R MODEL (*AL TAIL	*		*	*		*		*	
	*STED IN T	•		∓	*		* 	*		*		∓	
	*LARC 4-FC	UPWI 4		∓	*		*	*		∓		*	
	*(LEG 2)	7		∓	*		*	*		*		*	
	- *DECINITO O	1E EEV 65=	ODDITED VEHICLE A	***********************	* · ^ T T A Z	FORCE	+0 40	/ *	DOCKWELL /	-	04511 /4500	*DMC PC	0.400
] JT			ORBITER VEHICLE 1				*0.10	•	ROCKWELL/		LOVELL/LERC	*DMS-DR-	
WT	- *BITER AIR			*NS OF O.1 AND			*0.4 -		LERC -		R.BURROWS/RI	*OCT.,	1980
34	/*STEM CALI			*-SCALE ROSEMO			*2.7		10 BY 10-FOOT			-	
	TEST USIN			*AIR DATA SYS			∓		SUPERSONIC WIN	.÷ - UN	15	*	
100,5	18 * 10 - SCALE			*ROBES; MEASURI			-	*	D TUNNEL	*		*	
	*FOREBODY			*EBODY FLUSH S			* *	*	i	*		*	
	*-0 IN THE			+CE TAP PRESSI			-	*		-		-	
	*WIS 10 X *SUPERSONI			*ISTRIBUTIONS			-	*		-		∓	
	*UNNEL (OA	-		*RCS PORT PRES	* 3AUCC		-	*		-		∓	
	TUNNEL (UA	1234) 7	•	73	*		-	*		•		-	

ID * REPORT TITLE * TESTED * PURPOSE * TEST *MACH RANGE* AGENCY * PERSONNEL *OR COMMEN' ARC - *AERONOISE TEST RE*11-OTS (ORB, ET, *TO MEASURE FLUCTU*PRESSURE *O.040 / *ROCKWELL/ *B. J. HERRERA, C.*DMS-DR-24(11,97,87- *SULTS USING A 0.0*2 SRB'S)				WIND TUNNEL TEST	/ DMS DATA	PROCESSING			300
REPORT TITLE		*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
RC - *AERONOISE TEST RE*11-OTS (ORB, ET, *TO MEASURE FLUCTU*PRESSURE	TEST	*	* CONFIGURATIONS	* TEST	* TYPE OF	* SCALE	* TESTING	* TEST DMS	*PUBLICATIONS
1.97.87 - *SULTS USING A O.0-2 SRB'S) *ATING PRESSURE (A* 066 - *ARC * *L. STEVENS/RI *JAN., 1505-1 /*40-SCALE SPACE SH* * ERONOISS) ENVIRON* *3.5 * 11-FOOT, 9-FOOD-N. *HERSEY * *T. 8-FOOT, UNI*M. M. MOSER JR. * *SIA/B/C * *UTTLE VEHICLE CON* * *HICLE DURING TRAN* * * *TARY WIND TUNN*-DMS * *** ***R-151,995*EL (11-OTS) IN TH* * *SONIC/SUPERSONIC * * *E. * * * * * * * * * * * * * * * *	ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE	* AGENCY	* PERSONNEL	*OR COMMENTS
1.97.87 - *SULTS USING A O.0*2 SRB'S) *ATING PRESSURE (A* *06 - *ARC * *L. STEVENS/RI *JAN., 15 *05-1 /*40-SCALE SPACE SH* * * * ** ** ** ** ** ** ** ** ** ** *									
1.97.87 - *SULTS USING A O.0*2 SRB'S) *ATING PRESSURE (A* *06 - *ARC * * . STEVENS/RI *JAN., 15 *	DC -	*AEDONOISE TEST D	E+44-0TC (ODD ET	*TO MEASURE FILLS	TII+DDECCIDE	*0.040 /	*DUCKMEII/	*R .I HEDDEDA	C *DMS-DR-2401
1-F00T, 9-F00-0.W.HERSEY STANDARD STAN							•		
## FIGURATION 2A MOD*						•-			*
### ### ##############################									R. *
R-151,395*EL (11-OTS) IN TH*			ID*	*HICLE DURING TR	ΔN* ´				*
E AMES RESEARCH C *ASCENT AND ORBITE* * * * * * * * * * * * * * * * * * *	-		H*					*	*
ENTER UNITARY PLA	,					*	*	*	*
*N WIND TUNNELS *						*	*	*	*
RILAD						*	*	*	*
SWT - *F THE O.OS-SCALE *22HG1M52N1O8N1O9N*ODEL CONTROL SURF* 66		*	*		*	*	*	*	*
## A223 * ICLE ORBITER 102 *VT11VT12VT13VT14 *SYSTEMS AND * * *TUNNEL *D.W.HERSEY * * * * * * * * * * * * * * * * * * *	RLAD -	*SYSTEM CHECKOUT	0*B75C16F64F16FD3F	R*CHECKOUT OF ALL	M*FORCE	*0.24 -	*ROCKWELL/	*R. C. MENNELL	/ROC*DMS-DR-2402
# TUNNEL * D.W.HERSEY * * * * * * * * * * * * * * * * * * *	SWT -	*F THE O.OS-SCALE	*22HG1M52N108N109	N*ODEL CONTROL SU	RF*	*0.24	*NRLAD -	*KWELL INTERNA	TION*NOV., 1978
R-151,763*MODEL (39-0) IN T*VT15VT16VT17W131 *ESTABLISH THE OPE*	66 ,	/*SPACE SHUTTLE VE	H*110N111R20V27VT	IO*ACE AND PRESSUR	E *	*	*LOW SPEED WI	IND*AL	*
HE NAAL LOW SPEED	A223	*ICLE ORBITER 102	*VT11VT12VT13VT14	*SYSTEMS AND	*	*	*TUNNEL	*D.W.HERSEY	*
*WIND TUNNEL(GA22 *	R-151,76	3*MODEL (39-0) IN	T*VT15VT16VT17W131	*ESTABLISH THE O	PE*	*	*	*M. M. MANN	*
*3)		*HE NAAL LOW SPEE	D*	*RATIONAL STATUS	: O*	*	*	*-DMS	*
# # # # # # # # # # # # # # # # # # #		*WIND TUNNEL(0A22	2 *	*F THE COMPLETE	MO*	*	*	*	*
EDC - *RESULTS OF TESTS *B75C16E64F16FR22H*TO OBTAIN FORCE A*FORCE *O.3 - *ROCKWELL/ *J. J. DAILEDA AND*DMS-DR-24 WT16T - *USING A O.02-SCAL*G1M52N108N109N110*ND MOMENT DATA ON* *1.55 *AEDC - *J. MARROQUIN/ROC *VOLUME O1 70 /*E MODEL (89-OTS) *N111R2OU1V27V29VT*ALL VEHICLE ELEM * * *TRANSONIC PROP*KWELL INTERNATION*JAN., 1 A156A *OF THE SPACE SHUT*10VT11VT14VT17W13*ENTS (ORBITER, EX* * *ULSION WIND TU*AL * *NNEL (PWT-16T)*M. M. MANN * *HICLE IN THE AEDC* *EACH SOLID ROCKET* * * *-DMS ** **HICLE IN THE AEDC* *BOOSTER), WING A * * *-DMS ** **C PROPULSION WIND* *ND VERTICAL TAIL * * * * * * ** **TUNNEL (IA156A) * *LOAD INDICATORS, * * * * * * * * * * * * * * * * * * *		*3)	*	*DEL	*	*	*	*	*
WT16T - *USING A O.02-SCAL*G1M52N108N109N110*ND MOMENT DATA ON*		*	*	*	*	*	*	*	*
70	EDC -	*RESULTS OF TESTS	*B75C16E64F16FR22	2H*TO OBTAIN FORCE	A*FORCE		*ROCKWELL/		
# 156A *OF THE SPACE SHUT*10VT11VT14VT17W13*ENTS (ORBITER, EX* * * * * * * * * * * * * * * * * * *									
R-160,515*TLE INTEGRATED VE*1T39S27									TION*JAN., 1981
HICLE IN THE AEDC									*
*16-FOOT TRANSONI *	R-160,519					*	*NNEL (PWT-10		*
C PROPULSION WIND						*	*	*-DMS	*
*TUNNEL (IA156A) *			-	• •		*	*	*	*
*						*	*	*	*
*		*TUNNEL (IA156A)	*			*	*	*	*
*		*	*			*	*	*	*
*		*	*			*	*	*	*
		*	*		\P *	*	*	*	*
* * * * * * * * *		*	*		*	*	*	*	*
		*	*	*	*	*	*	*	*

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	*	*	*			*MODEL	*		* COGNIZANT	* BASIC
TES			FIGURATIONS * TESTED *	TEST PURPOSE	* TYPE OF * TEST	* SC *MACH RA	CALE*		* TEST DMS * PERSONNEL	*PUBLICATI *OR COMMEN
AEDC	- *RESULTS O	F TESTS *87501	6E64F16FR22H*T0	ORTAIN FORCE As	FORCE	*0.3 -	*1	ROCKWELL/	*J. J. DAILEDA	AND*DMS-DR-24
PWT 16T	- *USING A O	.02-SCAL+G1M52	N108N109N110*ND	MOMENT DATA ON		*1.55	*#	AEDC -	*J. MARROQUIN/R	OC *VOLUME 02
470 IA156A			20U1V27V29VT*ALL 1VT14VT17W13*ENT			*		FRANSONIC PROF SLSION WIND TU	P*KWELL INTERNAT	ION*JAN., 1
		RATED VE+1T39S		NAL TANK, AND		*		NEL (PWT-16T)		*
	*HICLE IN			H SOLID ROCKET		*	*	(, ,	*-DMS	*
	*16-F00T T			STER), WING A		*	*		*	*
	*C PROPULS			VERTICAL TAIL		*	*		*	.*
	*TUNNEL (I	A156A) *		D INDICATORS, * VON AND RUDDER*		*	*		*	*
	*	*		IGE MOMENTS. A		*	*		*	*
	*	*		BASE-BODYFLAP		*	*		*	*
	*	*	*PRE	SSURE DATA	ŧ	*	*		*	*
4 FDC	* *DECIU TC O	* C TECTC +D7E04	* CEC4E4CEDOOU+TO	0074711 50005 4	. FODOE	*	*	00000511	*	*
AEDC PWT16T			6E64F16FR22H*T0 N108N109N110*ND			*0.3 - *1.55		ROCKWELL/	*J. J. DAILEDA  *J. MARROQUIN/R	
470			20U1V27V29VT*ALL			*			*KWELL INTERNAT	
IA156A			1VT14VT17W13*ENT			*		JLSION WIND TO		*
CR-160		RATED VE+1T39S		NAL TANK, AND		*	*1	INEL (PWT-16T)		*
	*HICLE IN			H SOLID ROCKET		*	*		*-DMS	*
	*16-F00T T *C PROPULS			STER), WING A * Vertical tail *		*	*		*	*
	*TUNNEL (I			D INDICATORS.		*	*		*	*
	*	*		VON AND RUDDER		*	*		*	*
		*		IGE MOMENTS, A *		*	*		*	*
	*	*		BASE-BODYFLAP *	•	*	*		*	*
	*	*	*PRE	SSURE DATA	•	*	*		*	*
ARC	- *RESULTS O	F TESTS *88-OT	S02 SCALE *TO	DETERMINE THE *	FORCE	* .020	/ *6	OCKWELL/	*T.J. DZIUBALA,	վ. *DMS-DR-240
11TWT			E INTEGRATED*EFF			*.6 -	-	RC -	*STONE/RI	*VOLUME O1
275-1			SHUTTLE VE *IN	PROPULSION SYS*	ŧ	*1.40	* 1	1-FOOT TRANSC	*S. R. HOULIHAN	*OCT., 19
IA119		ACE SHU *HICLE		(MPS) AND SOL*		*		IC WIND TUNNE		*
	510*TTLE INTE, EHICLE JE			ROCKET BOOSTER* B) PLUMES ON *		*	*L	. (UNITARY)	*-DMS	*
JK- 160,	*IN THE NA			ICLE PRESSURE *		*	*		*	*
CK- 160,	*PWT_11 X			TRIBUTIONS, WI*		*	*		*	*
LK- 16U,		IA119) *		BENDING AND TO+		*	*		*	*
LK- 160,	*LEC (TEST	*		ON LOADS AND E+		*	*		*	*
CK- 160,	*LEC (TEST	**				*	*		*	*
CR-160,	*LEC (TEST	*		ON HINGE MOMEN*		<u>.</u>				.4.
CK- 160	*LEC (TEST * * *	*	*LEV *TS.			*	*		*	*

		1				
	WIND TUNNEL TE	ST / DMS DATA	PROCESSING			302
* * * CON TEST * * CON ID * REPORT TITLE *	* NFIGURATIONS * TEST TESTED * PURPOSE	* TYPE OF	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
11TWT - *USING A O.O20-SCA*OF TH	FS02 SCALE *TO DETERMINE HE INTEGRATED*EFFECTS OF TH E SHUTTLE VE *IN PROPULSION  * TEM (MPS) AND *ID ROCKET BOO *(SRB) PLUMES *VEHICLE PRESS *DISTRIBUTIONS *NG BENDING AN *RSION LOADS A *LEVON HINGE M *TS.	HE MA*PRESSURE  I SYS* D SOL* DSTER* ON * SURE * G, WI* HD TO* AND E*	*.6 - *1.40 *	*ARC - *11-FOOT TRANSD *NIC WIND TUNNE	*T.J. DZIUBALA,J. *STONE/RI *S. R. HOULIHAN *B. J. BURST *-DMS * * * *	*DMS-DR-2404 *VOLUME 02 *OCT., 1980 * * * * *
11TWT - *USING A O.O2O-SCA*OF TI 275-1	*TS02 SCALE *TO DETERMINE HE INTEGRATED*EFFECTS OF TH E SHUTTLE VE *IN PROPULSION  *TEM (MPS) AND *ID ROCKET BOO *(SRB) PLUMES *VEHICLE PRESS *DISTRIBUTIONS *NG BENDING AN *RSION LOADS A *LEVON HINGE M *TS. * TS02 SCALE *TO DETERMINE	HE MA*PRESSURE N SYS* O SOL* ON * SURE * S, WI* ND TO* AND E* ####################################	*.6 - *1.40 * * * * * * * * * * * * * * * * * * *	*ARC - *11-FOOT TRANSO *NIC WIND TUNNE *L (UNITARY) * * * * * * * * * * * * * * * * * * *	*-DMS  *  *  *  *  *  *  *  *  *  *  *  *  *	*VOLUME 03 *OCT., 1980 * * * * * * * * * * * * * * * * * * *
	HE INTEGRATED*EFFECTS OF THE SHUTTLE VE *IN PROPULSION *TEM (MPS) AND *ID ROCKET BOD *(SRB) PLUMES *VEHICLE PRESS *DISTRIBUTIONS *NG BENDING AN *RSION LOADS A *LEVON HINGE N *TS.	N SYS* D SOL* DSTER* ON * SURE * S, WI* ND TO* AND E*	*1.40 *	*11-FOOT TRANSO *NIC WIND TUNNE	*STONE/RI *S. R. HOULIHAN *B. J. BURST *-DMS * * * * * * * * * * * * * * *	*VOLUME 04 *OCT 1980 * * * * * * * * * * * * * *

					WIND T	UNNEL TES	т /	DMS DATA	PROCES	SING					303
	*	:	*		*		*		*MODEL		*	*	COGNIZANT	* 1	BASIC
TEST	*		*	CONFIGURATIONS	*	TEST	*	TYPE OF			* TESTING	*	TEST DMS		LICATIONS
ID	*	REPORT TIT	TLE *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR	COMMENTS
		RESULTS OF A		DV 102		TAIN BASI					*ROCKWELL/		. ZEMAN/RI, F		
		SPEED APPROA		•		ITY AND C		RESSURE	*0.25		*ARC -		MULFINGER/RI,		
1-1	•	D LANDING EX				ATA FOR C			*0.40		*12-FOOT PRESSU				T., 1978
101		ENTAL INVEST				ITER, DET			*		*RE TUNNEL		. BROWNSON/NA		
151,7		TION OF A O.			-	NDIVIDUAL			*	,	*		RC, C.Q. ALLE	.N*	
		CALE SPACE S				INGE MOME			*	•	*		SA-ARC	*	
		E ORBITER MO			•	AIN GROUN			*	1	*		. HERSEY	*	
		39-0) IN THE	_			S ON PITC			*	•	*		W. KLUG	*	
		/AMES RESEAR				TERAL DIR			*	•	*	*-DM	S	*	
		NTER'S 12-FO				STABILIT			*	,	*	*		*	
		ESSURE WIND	TUNNE*			NTROL WIT			*	,	*	*		*	
	*	L (DA101)	*			G GEAR DE			*	,	*	*		*	
	*		*			AND CALIE			*	•	*	*	•	*	
	*		*			OV 102 AT			*	,	*	*		*	
	*		*			YSTEM (FL	.USH*		*	. ,	*	*		*	
	*		*			C TAPS)	*		*	,	*	*		*	
_	*		*		*		*		*		*	*	754441/07 5	*	DD 040E
C		RESULTS OF A		0V102		TAIN BASI					*ROCKWELL/		. ZEMAN/RI, F		
PT		SPEED APPROA				ITY AND C		RESSURE	*0.25		*ARC -		MULFINGER/RI.		
8-1	•	D LANDING EX			_	ATA FOR O			*0.40		*12-FOOT PRESSU				1., 1976
101		ENTAL INVEST				ITER, DET			*		*RE TUNNEL		. BROWNSON/NA		
-151,/		TION OF A O.				NDIVIDUAL					*		RC, C.Q. ALLE	.141*	
		CALE SPACE S				INGE MOME			*		<b>*</b> •		SA-ARC	*	
		E ORBITER MO	•			AIN GROUN			*		<b>.</b>		.HERSEY	<i>*</i>	
		39-0) IN THE				S ON PITC			*		<del>*</del>		W. KLUG	<del>-</del>	
		/AMES RESEAR				TERAL DIR			*			*-DM	5	*	
		NTER'S 12-FO				STABILIT			*	,	<b>∓</b> 	<del>*</del>		-	
		ESSURE WIND	TUNNE *			NTROL WIT		•	*		<b>.</b>	Ī.			
	*	L (OA101)	*			G GEAR DE			*		<del>*</del>	-		<b>-</b>	
	Ŧ		*			AND CALIE			-		T -	-		-	
	*		*			OV102 AI YSTEM (FL			-		<del>-</del>	-		<b>-</b> -	
	*		-			TSTEM (FL C TAPS)	.∪3⊓≠ +		•		<b>-</b> -	*		*	
	<b>.</b>				*	G (APS)	<i>-</i>		*		<del>-</del> <b>±</b>	*		*	
	-		•		-		*		-		<del>-</del>	-		-	
												•			
												-			

							WIND	TUNNEL	TEST /	/ D	MS DATA	PROCES	SING							304
	*			*			*			*		*MODEL	_	•		*	COGNIZANT	*	BASI	10
TEST	*			*	CONF	IGURATIONS	*	TEST		*	TYPE OF			<ul><li>TESTIN</li></ul>		*	TEST DMS	*	PUBLICA	ATIONS
1D	*	REPORT	TITLE	* 		TESTED	*	PURPOS	E	* 	TEST	*MACH	RANGE	* AGENCY		*	PERSONNEL	* 	OR COM	MENTS
ARC	- *R	ESULTS :	OF A LO	W *O	V 102		*TD (	OBTAIN E	ASIC S	S*FO	RCE	* 0.	.050/	*ROCKWELL	./	*W.I	M. ZEMAN/RI,	. R.*	DMS-DR	-2405
12PT			PROACH								ESSURE			*ARC			MULFINGER/F			
218-1	/*D	LANDIN	G EXPER	IM*				DATA FO				+0.40		*12-F00T	<b>PRESSU</b>	*R.I	R. BURROWS/F	रां∗	SEPT.,	1978
<b>DA101</b>	-		VESTIGA				*2 OF	RBITER.	DETERM	<b>V</b>  *		*		*RE TUNNE			J. BROWNSON			
CR-151,	758*T	ION OF	A 0.050	-S*			*INE	INDIVID	UAL PA	Δ*		*		*		*A-	ARC, C.Q. AL	LLEN	1	
·			CE SHUT				*NEL	HINGE M	IOMENTS	S*		*		*		*/N/	ASA-ARC	*	:	
	*E	ORBITE	R MODEL	(*		•	*. OF	STAIN GR	OUND E	E*		*		*		*D.1	W.HERSEY	*	•	
	*3	9-0) IN	THE NA	SA*			*FFE(	CTS ON P	ITCH A	Δ*		*		*		*G.	W. KLUG	*		
	*/	AMES RE	SEARCH (	CE*			*ND 1	LATERAL	DIRECT	T*		*		*		*-D!	MS	4	,	
	*N	TER'S 1	2-F00T 1	PR*			*ION	AL STABI	LITY A	Δ*		*		*		*				
	* E	SSURE W	IND TUN	NE*			*ND (	CONTROL	WITH I	L*		*		*		*		*	•	
	* L	(OA101	)	*			*AND	ING GEAF	DEPLO	<b>0</b> *		*		*		*		*	t	
	*			*			*YED	, AND CA	LIBRAT	T *		*		*		*		*	•	
	*			*				HE 0V 102				*		*		*		*	•	
	*			*			*ATA	SYSTEM	(FLUS	H*		*		*		*		*	k	
	*			*			*STA	TIC TAPS	;)	*		*		*		*		*		
	*			*			*			*		*		*		*			ĸ	
ARC	- *R	ESULTS	OF A LO	W *0	V102		*TO (	OBTAIN E	BASIC S	S*F0	RCE	* 0.	.050/	*ROCKWELL	./	*W.	M. ZEMAN/RI	, R.	DMS-DR	-2405
12PT	- *S	PEED AP	PROACH .	AN*							RESSURE			*ARC	-		MULFINGER/			
218-1			IG EXPER					DATA FO				*0.40					R. BURROWS/			1978
OA 101	* E	NTAL IN	VESTIGA	- *			*2 OI	RBITER,	DETER!	M*		*		*RE TUNNE	L		J. BROWNSON,			
CR-151,			A 0.050					INDIVID				*		*			ARC, C.Q. A	LLEN:	k	
		-	CE SHUT					HINGE N				*		*			ASA-ARC		k	
	* E	ORBITE	R MODEL	(*			*, O	BTAIN GF	SOUND I	E *		*		*			W.HERSEY	•	<b>k</b>	
	*3	19-0) IN	THE NA	SA*			*FFE	CTS ON F	ITCH /	<b>A</b> *		*		*			W. KLUG	3	k	
	•	-	SEARCH	_				LATERAL				*		* .		*-D	MS	•	k	
			2-F00T				*ION	AL STAB	LITY /	<b>A</b> *		*		*		*		,	ĸ	
			IND TUN	NE*				CONTROL				*		*		*		,	k	
	*[.	. (OA101	)	*				ING GEAR				*		*		*			*	
	*			*				, AND CA				*		*		*		3	k	
	*			*				HE 0V102				*		*		*		,	k	
	*			*				SYSTEM		H*		*		*		*		,	k	
	*			*				TIC TAPS	5)	*		*		*		*		•	k	
	*			*			*			*		*		*		*			k	

	WIND TUNNEL TEST / DMS DATA	PROCESSING	305
* * TEST * * CONFIGUR/ ID * REPORT TITLE * TEST		*MODEL *  * SCALE* TESTING  *MACH RANGE* AGENCY	* COGNIZANT * BASIC * TEST DMS *PUBLICATIONS * PERSONNEL *OR COMMENTS
C - *RESULTS OF A LOW *OV102	*TO OBTAIN BASIC S*FORCE	* 0.050/ *ROCKWELL/	*W.M. ZEMAN/RI, R.*DMS-DR-2405
PT - *SPEED APPROACH AN*	*TABILITY AND CONT*PRESSURE	*0.25 - *ARC -	*H. MULFINGER/RI, *VOLUME 05
18-1 /*D LANDING EXPERIM*	*ROL DATA FOR OVIO*		SU*R.R. BURROWS/RI *SEPT. 1978
101 *ENTAL INVESTIGA- *	*2 ORBITER, DETERM*	* *RE TUNNEL	*J.J. BROWNSON/NAS*
-151,760*TION OF A 0.050-S*	*INE INDIVIDUAL PA*	* *	*A-ARC, C.Q. ALLEN*
*CALE SPACE SHUTTL*	*NEL HINGE MOMENTS*	* *	*/NASA-ARC *
*E ORBITER MODEL (*	*, OBTAIN GROUND E*	* *	*D.W.HERSEY *
*39-0) IN THE NASA*	*FFECTS ON PITCH A*	* *	*G. W. KLUG *
*/AMES RESEARCH CE*	*ND LATERAL DIRECT*	* *	*-DMS *
*NTER'S 12-FOOT PR*	*IONAL STABILITY A*	* *	* *
*ESSURE WIND TUNNE*	*ND CONTROL WITH L*	* *	* *
*L (OA101) *	*ANDING GEAR DEPLO*	* *	* *
* *	*YED, AND CALIBRAT*	* *	* *
	*E THE OV102 AIR D*	* *	* *
	*ATA SYSTEM (FLUSH* *STATIC TAPS) *		* *
* *	* * *	* *	
RC - *RESULTS OF A LOW *OV102	*TO OBTAIN BASIC S*FORCE	* 0.050/ *ROCKWELL/	*W.M. ZEMAN/RI, R.*DMS-DR-2405
PT - *SPEED APPROACH AN*	*TABILITY AND CONT*PRESSURE	*0.25 - *ARC -	*H. MULFINGER/RI. *VOLUME 06
8-1 /*D LANDING EXPERIM*	*ROL DATA FOR OVIO*		SU*R.R. BURROWS/RI *OCT., 1978
101 *ENTAL INVESTIGA- *	*2 ORBITER, DETERM*	* *RE TUNNEL	*J.J. BROWNSON/NAS*
-151,761*TION OF A 0.050-S*	*INE INDIVIDUAL PA*	* *	*A-ARC, C.Q. ALLEN*
*CALE SPACE SHUTTL*	*NEL HINGE MOMENTS*	* *	*/NASA-ARC *
*E ORBITER MODEL (*	*, OBTAIN GROUND E*	* *	*D.W.HERSEY *
*39-0) IN THE NASA*	*FFECTS ON PITCH A*	* *	*G. W. KLUG *
*/AMES RESEARCH CE*	*ND LATERAL DIRECT*	* *	*-DMS *
*NTER'S 12-FOOT PR*	*IONAL STABILITY A*	* *	* *
*ESSURE WIND TUNNE*	*ND CONTROL WITH L*	* *	* *
*L (DA101) *	*ANDING GEAR DEPLO*	* *	* *
* *	*YED, AND CALIBRAT*	* *	* *
* *	*E THE OV102 AIR D*	* *	* *
* *	*ATA SYSTEM (FLUSH*	* *	* *
* . *	*STATIC TAPS) *	* *	* *
* *	* *	* *	* *

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						WIND	TUNNEL TEST	/	DMS DATA	PROCESSIN	G					306
	*			*		 *		*		*MODEL		•	*	COGNIZANT	* BAS	IC
TEST ID	*	REPORT T	ITLE	* CD!	NFIGURATIONS TESTED	* *	TEST PURPOSE		TYPE OF TEST	* SCA *MACH RAN			*	TEST DMS PERSONNEL	*PUBLIC *OR COM	
MSFC					C12,E62,F10,M				FORCE		•	*ROCKWELL/		P. GARTON/RI	*DMS~DR *JULY.	
14TWT 649					28,R5,V8,W127 .AT17.AT18,FL					* 0.6- * 1.25		*MSFC - *14-INCH TRISO	_	E. VAUGHN	*UULT,	1902
IA181					,AII/,AIIB,FL 6.FL9.FR6.PT1					+ 1.20		*IC WIND TUNNE			*	
					14,PT20,T20		INAL TAIN	*		*		*	*	m3	*	
OK 707,0		ON A .00				*		*		*		*	*		*	
		ODEL (74-			020	*		*		*	,	*	*		*	
		LV TO DET				*		*		*		*	*		*	
	* I	NFLUENCE (	OF ORB	*		*		*		*	:	*	*		*	
	* T	ER AND SRI	B'S ON	*		*		*		*	:	*	*		*	
	* T	EH EXTERN	AL TANK	<b>(</b> *		*		*		*		*	*		*	
	*1	IOSE PRESSI	URE DI	*		*		*		*		*	*		*	
	*5	TRIBUTION	(IA18	1*		*		*		*	:	*	*		*	
	*)	<b>)</b>		*		*		*		* .		*	*		*	
	*			*		*		*		*		*	*_		*	
ARC					7F5M4V7W111		BTAIN HYPER	-	HEAT-TRANS		-	*ROCKWELL/		L. LEMOINE/RI		
		EAT TRANS					HEATING DAT			* 5.3		*ARC -		L. BERTHOLD/RI	*SEP1.,	1982
233-1		S ON THE					ERIFY ORBIT			*		*3.5-FOOT HYPE			*	
IH73		TAGE SPAC					HEATING PRE			*		*SONIC WIND TU *NEL	N*G. D-*		*	
CR-16/,3		E CONFIGU					ONS FOR THE	-		*		*NCL	*-L	m5	Ī.	
		NT RTLS ABO SION PROFI					T RTLS ABORT ION PROFILE	V  →		-		*	*		*	
		TIONS USI				*133.	ION PROFILE	*		*		*	*		*	
		0.006 SCAL				*		*		*		*	*		*	
		50-0 & 41-	_			*		*		*		*	*		*	
		E NASA/AR				*		*		*		*	*		*	
		OT HWT (I		*		*		*		*		*	*		*	
				*		*		•		*		*	*		*	

)

TEST * ID *		*												
ID *				*		*		*MODE!		*	*	COGNIZANT	* BAS	
		*	CONFIGURATIONS		TEST		TYPE OF			* TESTING	*	TEST DMS	*PUBLIC	
RC - *	REPORT T	ITLE *	TESTED	* 	PURPOSE		TEST	*MACH	KANGE	* AGENCY		PERSONNEL	*OR COM	
	DESILITS OF	TESTS #F	375C16E64F16FR22I	H*TD D	RTAIN FORCE	A * DI	DESSIBE	*1 55	_	*ROCKWELL/	*.1	J. DAILEDA	AND+DMS-DR	-240
			31M52N108N109N110					*2.5		*ARC -		MARROQUIN/R		
			1111R20U1V27V29V					*		*9-FOOT BY 7				19
			10VT11VT14VT17W1					*		*OT SUPERSON			*	
	TLE INTEGR				AL TANK, AND			*		*WIND TUNNEL			* .	
*	HICLE IN TH	IE NASA*	-	*EACH	SOLID ROCKE	Г*		*		*NITARY)	*-DI	MS	*	
*	AMES RESEA	ARCH CE*		*B00S	TER), WING A	*	•	*		*	*		*	
*	NTER 9X7 FO	OOT SUP*		*ND V	ERTICAL TAIL	*		*		*	*		*	
*	ERSONIC WI	*NUT UNN		*LOAD	INDICATORS,	*		*		*	*		*	
*	EL (IA156B)	*		*ELEV	ON AND RUDDE	₹*		*		*	*		*	
*	t	*			E MOMENTS, A			*		*	*		*	
*	•	*			ASE-BODYFLAP	*		*		*	*		*	
*	ı	*		*PRES	SURE DATA	*		*		*	*		*	
*		*		*		. *		*		*	* .		*	
			375C16E64F16FR22I							*ROCKWELL/		J. DAILEDA		
			31M52N108N109N110				DRCE	*2.5		*ARC -		MARROQUIN/F		
			N111R20U1V27V29V					*		*9-FOOT BY 7			ION*JULY,	19
			10VT 1 1VT 14VT 17W1:					*		*OT SUPERSON			*	
	TLE INTEGRA		1139527		AL TANK, AND			*		*WIND TUNNEL	•		*	
	HICLE IN TH				SOLID ROCKE			*		*NITARY)	* -D	MS	*	
	AMES RESEA				TER), WING A ERTICAL TAIL			<b>-</b>		* *	Ī		*	
	ERSONIC WI				INDICATORS.			Ţ		*				
	EL (IA156B)				ON AND RUDDE			*		*	*		*	
*	LL (INIOOD)	*			E MOMENTS. A			*		*	*		*	
*	:	*			ASE-BODYFLAP			*		*	*		*	
*		*			SURE DATA	*		*		*	*		*	
*	•	*		*	JUNE BRIK	*		*		*	*		*	

							WIND	TUNNEL TEST	/ DM	S DATA	PROCES	SING						308
	*			*			*		*		*MODEL		*		*	COGNIZANT	* BA	SIC
TEST	*			*	-	GURATIONS	*	TEST		YPE OF		-		ESTING	*			CATIONS
ID	*	REPORT	TITLE	*	T	ESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* A(	SENCY	*	PERSONNEL	*OR CO	MMENTS
ARC								BTAIN FORCE						<b>KWELL/</b>		J. DAILEDA A		
97SWT								MOMENT DATA O		CE	*2.5 *		*ARC			MARROQUIN/RO		
272 IA156B								VEHICLE ELEM			*			SUPERSON		ELL INTERNAT	LUN-UULT,	1960
		TLE INTE						S (ORBITER, E NAL TANK. AND			<del>*</del>					M. MANN	*	
CR- 160,		ICLE IN			139527			H SOLID ROCKE			÷		*NITA		. (U+m. ]-*		*	
		AMES RE						STER), WING A			*		*	HK1)	*	mu	*	
		NTER 9X7						VERTICAL TAIL			*		*		*		*	
		RSONIC						D INDICATORS.			*		*		*		*	
		L (IA15		*				VON AND RUDDE			*		*		*		*	
	*	(12.10	,	*				GE MOMENTS, A			*		*		*		*	
	*			*				BASE-BODYFLAP			*		*		*		*	
	*			*				SSURE DATA	*		*		*		*		*	
	*			*			*		*		*		*		*		*	
LARC	- *,	ADDITION	AL TRAN	S0*0	RBITER		*VER	IFY STABILITY	/ *FOR	CE	*0.015	5 /	*LAR	c /	*B.	SPENCER, JR.	.G. *DMS-D	R-2409
8TPT	- +	NIC STAB	ILITY A	ND+			*AND	CONTROL INCR	₹E+		*.6	-	*LAR	С -	*M.	WARE, LARC	*SEPT.	, 1981
803	/*	CONTROL	CHARACT	E *			*MEN	TS DERIVED FR	<b>*</b> 0		*1.2		*8-F	DOT TRAN	U*NOSI	UNDERWOOD,	JSC*	
LA115	*	RISTICS	DF A O.	01*			*M P	REVIOUS TESTS	S *		*		*IC (	PRESSURE	E TU∗B.	J. BURST	*	
CR-160,	842*	5 SCALE(	REMOTEL	.Y *			*SUB	JECTED TO UNK	⟨N*		*		*NNE	L	* ~[	DMS	*	
	*(	CONTROLL	ED ELEV	'ON*			*OWN	BLOCKAGE AND	) *		*		*		*		*	
	*	) MODEL -	44-0 SP	AC*			*SH0	CK REFLECTION	<b>/</b> *		*		*		*		*	
	*	E SHUTTL	E ORBIT	ER*			*EFF	ECTS AND OBTA	<b>\I</b> *		*		*		*		*	
		rested I						DDITIONAL STA			*		*		*		*	
		SA/LARC		TP*			*ILI	TY AND CONTRO	JL.*		*		*		*		*	
	*	T (LA115	)	*			*DAT	A	*		*		*		*		*	
	*			*			*		*		*		*		*		*	
AEDC								ERMINE AERODY		T-TRAN		-		KWELL/	-	. W. FOUST/RI		R-2410
HWTB ·		SA/RI OR			MODEL	9,1-0)		C HEATING TO			*8.0		*AED	-	_	.W.HERSEY	*JUNE,	1979
		S TIP HE						ORBITER WING	L*		*					. E. VAUGHN	*	
OH56		T WITH T					*EAD	ING EDGE	*		*		*D T	UNNEL (E	3) *-[	DMS	*	
CR-151,		CALE ORB					*		*		*		*		*		*	
		MODEL (9					*		*		*		*		*		*	
		THE AEDC					*		*		*		*		*		*	
		PERSONIC					*		*		# -		*		*		*	
	*1	JNNEL (D	H56)	*			*		*		*		*		*		*	
	*			*			*		* .		*		*		*		*	
									,									
									, 1									

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							WIND	TUNNEL TE	ST /	DMS DATA	PROC	ESSING		<b>-</b>			30
	*			*			*		*		*MOD	EL	*	*	COGNIZANT	* BA	SIC
TEST ID	*	DEDODT	TTTLE	*		GURATIONS	*	TEST PURPOSE		TYPE OF TEST			* TESTING * AGENCY	*	TEST DMS PERSONNEL	*PUBLI	-
			TITLE							1691	*MAC		* AGENCY			+UK CU	
ARC	- *RE	SULTS	OF HEAT	T*60	-ots	(B62C12E5	*TO C	BTAIN HEA	T-TR+H	HEAT-TRANS	5* O	.0175/	*ROCKWELL/	*J.	W. CUMMINGS,	AR*DMS-D	R-2412
	_					SR 18V8W1161					* 5		*ARC -		DKUNO /RI	*VOLUM	
234-1			E SHUTTL		S26)			IONS ON T			* 5		*3.5-FOOT HYP		•		198
1H90	_		ED VEHIC					SHUTTLE			*		*SONIC WIND 1			*	
CR-167,3		•	NS. USIN					ED VEHICL Simulate			*		*NEL	*G. *-DI	W. KLUG	*	
			75-SCALE					STAGE CON			*		*	*	MO	*	
			ODEL IN					FOR INTER			*		*	*		*	
•			/ARC 3.5					FLIGHT AT			*		* .	*		*	
	*FO	OT HWT	(IH-90)	*			*DES		*		*		*	*		*	
	*.			*			*		*		*		*	*		*	
										IEAT-TRANS	-		*ROCKWELL/		W. CUMMINGS,	_	
			-			SR 18VBW1 161					* 5		*ARC -		OKUNO /RI	*VOLUM	
234-1			E SHUTTL		526)			IONS ON T			* 5	. 2	*3.5-FOOT HYP			*DEC.,	198
IH90 CR-167.3			ED VEHIC					SHUTTLE ED VEHICL			*		*SONIC WIND 1 *NEL		W. KLUG	*	
CK-107,3			NS. USIN					SIMULATE			*		*NCL	*-DI		*	
			75-SCALE					STAGE CON			*		*	*	13	*	
			ODEL IN				-	FOR INTER			*		*	*		*	
			/ARC 3.5					FLIGHT AT			*		*	*		*	
	*FO	OT HWT	(IH-90)	*			*DES		*		*		*	*		*	
	*			*			*		*		*		*	*		*	
						64W131M16N2				ORCE	*		*NRLAD /		H.SPANGLER/RI		
			0.03 SCA			)3F9		O OBTAIN			* 1.		*ARC -		P. LEBLANC/RI	*AOFAW	
242-1			(47-0TS)		9527			MIC LOADS			* 2.		*9-FOOT BY 7-	–		*FEB.,	198
IA105B			PACE SHU					VEHICLE E			*		*OT SUPERSON: *WIND TUNNEL			*	
CR-160,8			THE NAS					(O,T,S) B RE INTEGR			*		*WIND TONNEL *NITARY)	*	MO	*	
			FOOT SU					D TO MEAS			*		**************************************	*		*	
	, .		WIND TUN					S DIRECTL			*		*	*		*	
		(IA10		*				INDICATO			*		*	*		*	
	*		•	*				HE WING,			*		*	*		*	
	*			*			*ICAL	TAIL AND	ELE*		*		*	*		*	
				*			*VONS	ı	*		*		*	*		*	
	*			*			*		*		*		*	*		*	

	<b></b>						WIND	TUNNEL T	EST /	DMS DATA	PROCES	SING						310
		*		*			*		*		*MODEL	- <b></b>	*		*	CDGNIZANT	* BASI	С
TEST		*		*	CON	FIGURATIONS	*	TEST		TYPE OF	*	SCALE	* TESTI	NG	*		*PUBLICA	
ID		* REPO	RT TIT	'LE *		TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENC	Y 	*	PERSONNEL	*OR COMM	IENTS
ARC						E64W131M16N2							*NRLAD			H. SPANGLER/RI		
97SWT		+USING						O OBTAIN			* 1.55		*ARC			P.LEBLANC/RI	*VOLUME	-
242-1		*E MODE				7		MIC LOAD			* 2.50					R. HOULIHAN	*FEB.,	1982
IA105B CR-160.8		OF THE						VEHICLE			*		*WIND TU			W. KLUG	*	
CK-100,		*HICLE						(O,T,S)   JRE INTEG			÷		*NITARY)		*-0	MO	*	
		*/ARC 9.						ID TO MEA			*		**		*		*	
		*ERSONI						S DIRECT	-		*		*		*		*	
		*EL (IA		*				INDICAT			*		*		*		*	
		*		*				HE WING.			*		*		*		*	
		*		*			*ICAL	TAIL AN	D ELE		*		*		*		*	
		*		*			*VONS	5	,	t	*		*		*		*	
		*		*			*		,	t .	*		*		*		*	
AEDC						6N108PR4PR7F	**TO F	PROVIDE A	CALI	FORCE			*NRLAD	/		E.WHITE/ARO, IN		
						4VT18VT19		TION OF T			*0.2		*AEDC	-		AEDC DIVISION		
431		*TTLE A		_				MOUNTED A		k .	*1.55					J.DZIUBALA AND		1980
0A232		*TEM US		-				PROBES AN	_		*					R.BURROWS/ RI	*	
CR-160,								NOSE BOO			*		*NNEL (P	WT-16T		W.HERSEY	*	
		*EBODY		•				) FT PROB	-		*		*			W. KLUG	*	
		*) IN T *PROPUL						DETERMINE			*		*		*-D	M2	*	
		*TUNNEL						NGLE OF A EASURE PR			:		*		Ţ.		*	
		* I OIVIVEE	(UMZS	) <i>2)</i> *				C PRESSU			*		*		*		*	
		*		*				AND DET			*		*		*		*	
		*		*				FECT OF			*		*		*		*	
		*		*	:		*SCAL		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>.</b>	*		*		*		*	
		*		*	ı.		*		1	k	*		*		*		*	
AEDC	-	*CALIBR	NOITA	TESTS*	874C1	6N108PR4PR7	*TO F	PROVIDE A	CALI	FORCE	* (	0.10/	*NRLAD	/	*W.	E.WHITE/ARO, II	NC*DMS-DR-	-2414
PWT 16T	-	*OF THE	SPACE	SHU *	R8PR1	4VT18VT19	*BRAT	FION OF T	HE SI		*0.2	-	*AEDC	-	*.	AEDC DIVISION	*VOLUME	02
431	/	*TTLE A	IR DAT	TA SYS*	99-0		*DE-N	MOUNTED A	IR DA	k	*1.55		*TRANSON	IC PRO	P*T.	J.DZIUBALA ANI	⊃ *MAY,	1980
OA232		*TEM US					*TA F	PROBES AN	D :	k	*					R.BURROWS/ RI	*	
CR-160,							*THE	NOSE BOO	M-MOU:	<b>k</b>	*		*NNEL (F	WT-16T		W.HERSEY	*	
		*EBODY						) FT PROB			*		*		_	W. KLUG	*	
		*) IN T						DETERMINE			*		*		*-D	MS	*	
		*PROPUL						NGLE OF A			*		*		*		*	
		*TUNNEL	(OA23	32) *			•	ASURE PR			*		*		*		*	
		<del>*</del>		*				C PRESSU			*		*		*		*	
		<del>≠</del> ±		*				, AND DET			*	•	*		*	•	*	
		<del>-</del>					_	FFECT OF	PRUBE	•	<b>.</b>		<b>-</b>		-		*	
		*		<i>*</i>			*SCAI	- C			<b>.</b>		-		-		*	
		<b>-</b>		*			7		,	•	7		-		-		₹	

	)									)								
	. <b></b> -														·			
						WIND	TUNNEL	TEST /	0	MS DATA	PROCES	SING			<b></b>			311
	*			*		*			*		*MODEL		*		*	COGNIZANT	* BAS	I C
TEST	*			* (	CONFIGURATIONS	*	TEST	٠,	k	TYPE OF	*	SCALE	*	TESTING	*	TEST DMS	*PUBLICA	ATIONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOS	E -	k	TEST	*MACH	RANGE	*	AGENCY	*	PERSONNEL	*OR COM	MENTS
с -	+R	ESULTS (	OF TESTS	*55	V 102 ORBITER	C*OBT.	AIN FORC	E AND	∗FΩ	RCE	* 0.02	, ,	*R(	DCKWELL/	*4.	J.DAILEDA/ROC	KW*DMS-DR	-24 15
_					FIGURATION MOD						*2.0			EDC -	*EL		*VOLUME	
			(105-0)				Y THE OR				*8.0				1∗Ū.	JORDAN/ARO,		1980
08/209	*F	THE SP.	ACE SHUT	T*	-	*STAI	BILITY A	ND CON	¥		*			TUNNEL (A)	*C	• •	*	-
151.78	4*L	E VEHIC	LE ORBIT	E*		*TRO	L CHARAC	TERIST,	k		*		*	<b>,,</b>	∗G.	G. MCDONALD	*	
-			ARNOLD			*ICS	IN PITO	H AND	þ		*		*		*-D	4S	*	
	*N	GINEERI	NG DEVEL	0*		*YAW	. AND VE	RIFY C	<b>k</b>		*		*		*		*	
	*P	MENT CE	NTER VON	*		*ONT!	ROL EFFE	CTIVEN:	k		*		*		*		*	
	*K	ARMAN F.	ACILITY	S*			AND TRI				*		*		*		* -	
	*U	PERSONI	C TUNNEL	*		*TS	IN THE M	ACH NU	k		*		*		*		*	
	* A	(DA209	) AND HY	P*		*MBE	R RANGE	FROM 2	×		*		*		*		*	
			TUNNEL B			*TO	8		k		*		*		*		*	
	* (	0A208/2	09)	*		*			k		*		*		*		*	
	*		,	*		*		1	×		*		*		*		*	
С -	+R	ESULTS	OF TESTS	*SS1	V 102 ORBITER	C*OBT	AIN FORC	E AND	⊧F0	RCE	*0.02	1	*R0	DCKWELL/	*d.	J.DAILEDA/ROC	KW*DMS-DR	-2415
					FIGURATION MOD						*2.0			EDC -	*ELI	•	*VOLUME	
			(105-0)				Y THE OR				*8.0					JORDAN/ARD,		1980
	•		ACE SHUT				BILITY A				*			TUNNEL (A)	*C		*	
			LE ORBIT				L CHARAC				*		*	romez (A)		G. MCDONALD	*	
,,			ARNOLD	_			IN PITO				*		*		*-D!		*	
			NG DEVEL				. AND VE				*		*		*		*	
			NTER VON	_			ROL EFFE				*		*		*		*	
			ACILITY				AND TRI				*		*		*		*	
			TUNNEL	_			IN THE W				*		*		*		*	
			) AND HY			-	R RANGE				*		*		*		*	
		•	TUNNEL B			*TO !		. KUN 2.	k		*		*		*		*	
		0A208/2		*		* 10 (	_	3			*		*		*		*	
	1	UAZUU/ 2	JJ,								-		_		-		- <b>T</b>	

			WIND TE	JNNEL TEST /	DMS D	ATA PROCESS	SING					3	312
	*	*	*		*	*MODEL	 ,	·	*	COGNIZANT	*	BASIC	
TEST	*	* CONFIGURATIONS	*	TEST	* TYPE		SCALE .	TESTING		EST DMS	*PU	BLICATIO	SNC
ID	* REPORT TITLE	* TESTED	* 1	PURPOSE	* TES	T *MACH F	RANGE	AGENCY	*	PERSONNEL	*0R	COMMENT	· S
MSFC -	*RESULTS OF TESTS	*LBM	*TO OB	TAIN 6-COMPO	)*FORCE	* 0.004	4 / ,	ROCKWELL/	*N.S.	DOUGHERTY,	A + DM	S-DR-241	16
	*IN THE NASA/MSFC			FORCE & MOME		<b>*.6</b>		MSFC -		MANSFIELD/RI			981
668	/*14-INCH TRISONIC	*ORBITER	*NT DAT	TA OF ELEMEN	<b>1</b> *	*4.96		TRISONIC WIND	*HUNT	SVILLE	*		
IA603	*WIND TUNNEL ON A	*SRB	*TS LB	M,O,SRB FOR	*	*	2	*TUNNEL	*J. E	. VAUGHN	*		
CR-160,82	4*.004 SCALE MODEL	*	*INTER	FACE STRUCTU	j*	*		k	*C. R	. EDWARDS	*		
	*(74-0TS) THRUST /	<b>4</b> *	*RES A	NALYSIS OF I	*	*	,	k	*-DMS	•	*		
	*UGMENTED SPACE SH	H*	*T/LBM	, O/ET, SRB,	/*	*	,	k .	*		*		
	*UTTLE INTEGRATED	*	*ET & 0	OF TOTAL VE	<b>-</b>  *	*	1	<b>k</b>	*		*		
	*VEHICLE (IA6O3)	*	*ICLE	FOR ASSESSI	<b>/</b> *	*	,	k .	*		*		
	*	*	∗G LBM	INFLUENCE (	<b>)</b> *	*		<b>k</b>	*		*		
	*	*	*N SSL	V FOREBODY (	2*	*	:	<b>k</b>	*		*		
	*	*	*OEFFS	; TO OBTAIN	*	*	:	<b>k</b>	*		*		
	*	*	*WING	& ELEVON FOI	₹*	*	:	<b>*</b>	*		*		
	*	*	*CE AN	D MOMENT DA	Γ*	*	:	*	*		*		
	*	*	*A FOR	WING STRUC	Γ*	*	;		*		*		
	*	*	*URES	ANALYSIS	*	* .	:	*	*		*		
	*	*	*		*	*	:	•	*		*		
	*RESULTS OF AEROTI						•	*ROCKWELL/		CLEARY/NASA-A			
	*ERMODYNAMIC HEAT			EVON/ELEVON			•	*ARC -		R.B. KINGSLAN	******	INE, 13	979
	/*TRANSFER TESTS OF			FUSELAGE/E		*7.3		+3.5-FOOT HYPE! +SONIC WIND TU!		HEDEEV			
OH58	*A 0.03-SCALE MOD			INTERFACE H		*		*NET *2001C MIND IO		MERSEY	-		
CK-151,//	O*EL (93-0) SIMULA			DISTRIBUTIO		*		*NEL	*-DMS		-		
	*ING THE ELEVON/E			VERIFY DESIG		*		<del>,</del>	+-DM2	•	-		
	*EVON GAP AND ELET		*N HEA	TING RATES.	*	*		*	<u>.</u>		-		
	*ON/FUSELAGE INTE		<b>∓</b>		*	-		<del>.</del>	Ţ		Ţ.		
	*FACE REGIONS OF		*		*	*		<del>*</del>	<b>-</b>		-		
	*HE SS ORBITER IN	*	*		*	*		<del>-</del>	<u>.</u>		-		
	*THE ARC 3.5HWT.	Ī	*		*	*		<b>↑</b>	Ţ		*		
ARC -	*RESULTS OF TESTS	*WEDGE CHARED MODE	* E***O OB	TAIN THE TE	* !!*!!!!***~T	DANC+E O	_	* *ROCKWELL/	+R .	J. HERRERA/RI		IS-DD-24	1Ω
	*OF A DEVELOPMENT					*7.3		*ARC -	*	J. HERRERA/RI			978
	/*FLIGHT INSTRUMEN			CTERISTICS		*/.J		*3.5-FOOT HYPE	- -		*	,	310
IH100	*ATION GAS TEMPER			EXISTING D				*SONIC WIND TU			*		
	4*TURE PROBE IN TH			TEMPERATUR		*		*NEL	*		*		
UK- 131,41	*AMES RESEARCH CE		*1 GAS		<b>-</b> +	* .		**   T	*		*		
	*NTER 3.5 FT. HYP		+PRUDE					<del>,</del> *	*		*		
	*RSONIC WIND TUNN		<del>-</del>			- -		<del>,</del>	*		*		
	*K50NIC WIND TONN *L (IH100)	<b>-</b>	- -		-	- -		<b>-</b> •	*		*		
		T .	<del>-</del>		T			7	~		~		

			WIND TUNNEL TEST	/ DMS DAT	A PROCESSING	•		313
	*	*	*	*	*MODEL	*	* CDGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS	* TEST	* TYPE (		E* TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANG		* PERSONNEL	*OR COMMENTS
ARC -	*RESULTS OF AN IN	IV*SSV OV102 ORBITE	R*DETERMINE AEROD	YN*FORCE	*0.6 -	*ROCKWELL/	*R. H. MULFINGER	, *DMS-DR-2419
5TT -	*ESTIGATION TO VE	R*CONFIGURATION MO	*AMIC STABILITY	AN*	*1.3	*LARC -	*J. J. DAILEDA/RO	C*SEPT., 1978
25	/*IFY SHUTTLE ORBI	T*DEL 104-0 INSTRU	M*D CONTROL CHARA	CT*	*	*16-FOOT TRANS	O*KWELL INTERNATION	·
	*ER AERO-CHARACTE		*ERISTICS AND CO		*	*NIC TUNNEL	*AL	*
		N*SSV OV102 ORBITE			*	*	*E. PUTNAM, W. CO	)M*
		K*CONFIGURATION MO			*	*	*PTON/LARC	*
		F*DEL 105-0 RIGID			*	*	*G. G. MCDONALD	*
	*LECTION EFFECTS		*N	*	*	*	*-DMS	*
	*TILIZING .02-SCA		*	*	*	*	*	*
	*E HI-FIDELITY MO		*	*	*	*	*	*
	*ELS 104-0 AND 10	_	*	*	*	*	*	*
	*-O IN THE LANGLE	-	*	*	*	*	*	*
	*RESEARCH CENTER	•	*	*	*	*	*	*
	*6-FT. TRANSONIC		*	*	*	*	*	*
	*IND TUNNEL DA270		*	*	*	*	*	*
	*/C	* .	*	*	*	*	*	* .
	*	*	*	*	*	*	*	*
DC -	*RESULTS OF TESTS	*MODEL 83-0 LINE	S*DETERMINE DETAIL	I *HF∆T-TRA	NS* 0.04 /	*ROCKWELL/	*P.L. LAMOINE/RI	*DMS-DR-2420
	*ON A O.O4-SCALE		*HEATING RCC-RSI		*7.88 -	*AEDC -	*J. E. VAUGHN	*NOV., 1982
	/*PACE SHUTTLE ORB		*NTERFACE AREA OF		*8.0	*HYPERSONIC WI		*
103A	*TER FOREBODY MOD		*LOWER FUSELAGE	*	*	*D TUNNEL (B)		*
	5*L.(83-0) IN THE	_	*AND OBTAIN RCS	N∩∗	*	*	*	*
,	*EDC VKF HYPERSON		*ZZLE HEATING	*	*	*	*	•
	*C WIND TUNNEL 'B		*	<u>*</u>	*	*	*	•
	*TO OBTAIN AERODY		·	•	*	*	*	•
	*NAMIC HEATING DI		*	•	*	•	•	•
	*TRIBUTION ON LOW	-	*	Ţ	*	•	•	
	*R FUSELAGE AND R		±		*	*	*	*
	*S NOZZLE AREAS (	_		Ţ		•	. •	7
	*H103A)	*	*	*	*	*	*	*
	*	*	*	*	*	* *	*	
	-	-	•	-	•	•	-	• "
	and the second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second s							

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	*	*		*		*MODE!	 L	<del></del>	*	COGNIZANT	* BAS	IC.
TEST	•	* CONFIGUR	ATIONS * T	EST *	TYPE OF			* TESTING		TEST DMS		
ID	* REPORT TIT				TEST			* AGENCY				
ARC	- *CALIBRATION	TEST5*99-0	*THE OBJE	CTIVES OF*F	ORCE	* (	0.10/	*ROCKWELL/	¥J.G	AWIENOWSKI	, W.*DMS-DR	-242
97SWT	- *OF THE SPACE	SHU *B74C16N108	PR7PR8P+THESE TE	STS WERE *		* 1.0	6- :	*ARC -	*AND	ERSON/ ARC	*VOLUME	01
282-1	/*TTLE ORBITER	AIR *R14VT18VT1	9 *TO DETER	MINE AIR *		* 3.	5	*9-F00T BY	7-F0*R.R	.BURROWS,	W.R. *DEC.,	19
B7SWT	- *DATA SYSTEM	USING*	*DATA SYS	TEM PROB *		*	:	*OT SUPERSO	NIC *CAR	LSON/ RI	*	
DA251B/0	*A 0.10-SCALE	ORB *	*E PITOT	AND STATI*		*		*WIND TUNNE	L (U*D.W	.HERSEY	*	
CR-160,4	95*ITER FOREBOD	Y MOD*	*C PRESSU	RE ERRORS*		*		*NITARY)	*G.	W. KLUG	*	
	*EL (99.0) IN	THE *	*. THE EF	FECT OF P*		*		*8-FOOT BY	7-F0*-DM	IS .	*	
	*NASA AMES RE	SEARC*	*ROBE SCA	LE ON STA*		*		*OT SUPERSO	NIC *	-	*	
	*H CENTER 9 X	7 AN*	*TIC PRES	SURE CALI*		*		*WIND TUNNE	L (U*		*	
	*D 8 X 7-F00T	LEGS*	*BRATION:	CALCULAT*		*		*NITARY)	*		*	
	*OF THE UNITA	RY P *	*E ANGLE-	OF-ATTACK*		*		*	*		*	
	*LAN WIND TUN	INEL (*	*SENSOR:	EVALUATE *		*		*	*		*	
	*0A251B AND C	*		SH PORT' *		*		*	*		*	
	*	*		E AIR DAT*		*		*	*		*	
	*	*	*A SYSTEM			*		*	*		*	
	*	*	*	*		*		*	*		· <b>*</b>	
ARC	- *CALIBRATION	TESTS*99-0	*THE OBJE	CTIVES OF*I	ORCE	*	0.10/	*ROCKWELL/	*J.G	AWIENOWSKI	. W. *DMS-DR	-242
97SWT	- +OF THE SPACE	SHU *B74C16N108				* 1.	6-	*ARC -	*ANE	RSON/ ARC	*VOLUME	02
282-1		AIR *R14VT18VT1		MINE AIR *		* 3.		*9-FOOT BY			W.R. *DEC.,	
87SWT	- *DATA SYSTEM			TEM PROB *		*		*OT SUPERSO			*	
DA251B/0	*A 0.10-SCALE			AND STATI*		*		*WIND TUNNE	L (U+D.V	.HERSEY	*	
	96*ITER FOREBOD			RE ERRORS*	•	*		*NITARY)		W. KLUG	*	
	*EL (99.0) IN			FECT OF P*		*		*8-FOOT BY	7-F0*-DN	IS	*	
	*NASA AMES RE			LE ON STA*		*		*OT SUPERSO			*	
	*H CENTER 9 X			SURE CALI*		*		*WIND TUNNE			*	
	*D 8 X 7-F001			CALCULAT*		*		*NITARY)	*		*	
	*OF THE UNITA			OF-ATTACK*		*		*	*		*	
	*LAN WIND TUN			EVALUATE *		*		*	*		*	
	*0A251B AND 0			SH PORT' *		*		*	*		*	
	*	*		E AIR DAT*		*		*	*		*	
	*	*	*A SYSTEM			*		*	*		*	
	*	*	*					•			*	

	)				)				
•		•							
			WIND TUNNEL TE	EST /	DMS DATA	PROCESSING			3
	*	*	*	*		*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURATIONS * TESTED	* TEST * PURPOSE	*	TYPE OF TEST	* SCALE *MACH RANGE	_	* TEST DMS * PERSONNEL	*PUBLICATION *OR COMMENTS
	*RESULTS OF THIN S				EAT-TRANS		*MMC /	*HARRY R. CARROLL	
	*KIN THERMOCOUPLE		*CHANGE IN HEA			*5.5	*AEDC -	*MMC	*APRIL, 19
	/*TESTS CONDUCTED 1		*, IF ANY DUE 1			*		IN*J. E. VAUGHN	*
H15	*N THE AEDC VKF TU		*E SMALL CHANG			*	*D TUNNEL (A)		*
ж-151, /e	37*NNEL A TO DETERMI		*THE NOSE SPIK			*	*	*-DMS	*
	*NE HEAT TRANSFER		*ONFIGURATION	-		*	*	*	*
	*RATES ON A .0275 *SCALE SSV ET FORE		*O MEASURE INT			*	*	*	- -
	*BODY (FH15)	. T	*RENCE HEATING			- -	-	Ī.	•
	+BUD1 (FH15)	T	*THE SURFACE A			<b>.</b>	-	* * * * * * * * * * * * * * * * * * *	-
	•	•	*D THE FORWARD *RING.TRAYS.GO			<u>.</u>	-	<u>.</u>	•
		•	*NES + BRACKET			•		<b>.</b>	*
	Ţ.	-	*TH + WITHOUT			<del>-</del>	<b>.</b>	Ţ.	•
		-	*E PROTUBERANCE			±	<u>.</u>	*	*
	<b>.</b>	-	*E PRUTUBERANC	·E3. +		*	<u>.</u>	Ţ.	-
ARC -	· *RESULTS OF THIN S	**************************************	*DETERMINE THE		EAT TDANS	* :*	*MMC /	*HARRY R. CARROLL	/*DMC-DD-242
	- *KIN THERMOCOUPLE	• •			EAT-TRANS	*	*ARC -	*MMC	*JAN., 198
237	/*TESTS CONDUCTED I		*E TO THE CHAN			*		ER∗JACK J. BROWNSON	
H16	*N THE NASA/ARC	*	*ROM 10,40 DEG			*	*SONIC WIND TO		*
	88*3.5 FT. HYPERSONI		*AL SPIKE TO A			*	*NEL	*C. R. EDWARDS	*
,,,,,,	*C WIND TUNNEL TO		*10.40 DEGREES			*	*	*-DMS	*
	*DETERMINE HEAT TR		*ICAL SPIKE	*		*	*	*	*
	*ANSFER RATES ON A		*TO MEASURE IN	JTFRF*		*	*	*	*
	*.0275 SCALE SSV		*ERENCE HEATIN			*	*	*	* .
	*ET FOREBODY(FH16)		*THE SURFACE A			*	*	*	*
	*	*	*ND THE FORWAR			*	*	*	*
	*	*	*FAIRING, TRAY			*	*	*	*
	*	*	*OX LINE AND E			*	*	*	*
	*	*	*ETS	*		*	*	*	*

	WIND TUNNEL TEST /	DMS DATA	PROCESSING			316
* * * CO	DNFIGURATIONS * TEST	* * TYPE OF	*MODEL * SCALE	* * TESTING	* COGNIZANT * TEST DMS	* BASIC *PUBLICATIONS
ID * REPORT TITLE *		* TEST	* SCALE	-	* PERSONNEL	*OR COMMENTS
TO T REFORM THEE T	TESTED + FORFUSE		RANGE		- PERSUNNEL	
ARC - *RESULTS OF TESTS *B620	C9E64F9M16RSV8*DETERMINE THE EFF	*FORCE	*0.6 -	*ROCKWELL/	*S. R. HOULIHAN/RO	1+DMS-DR-2424
11.97.87- *ON THE EFFECTS OF*W131			*2.5		*CKWELL INTERNATION	
289-1 /*AEROELASTICITY O *	*CITY OF THE ORBIT		*	*11-F00T, 9-F00		*OCT., 1980
97SWT - *F THE SPACE SHUTT*	*ER VERTICAL TAIL		*	*T. 8-FOOT, UNI		*
OA126A,B,C*LE ORBITER VERTIC*	*ON THE LATERAL DI	*	*	*TARY WIND TUNN	i*-DMS	*
CR-160,506+AL TAIL USING A O+	*RECTIONAL STABILI	*	*	*EL	*	*
*.03-SCALE MODEL (*	*TY, RUDDER CONTRO		*	*9-FOOT BY 7-FO	)*	*
*47-0) IN THE NASA*	*L CHARACTERISTICS		*	*OT SUPERSONIC	*	*
*AMES UNITARY WIN *	*AND TAIL LOADS O	*	*	*WIND TUNNEL (L	J*	*
*D TUNNELS (DA126A*	*F THE ORBITER	*	*	*NITARY)	*	*
*/B) *	*	*	*	*	*	*
* *	*	*	*	*	*	*
ARC - *RESULTS OF TESTS *B620	C9E64F9M16RSV8*DETERMINE THE EFF	*FORCE	*0.6 -	*ROCKWELL/	*S. R. HOULIHAN/RO	D*DMS-DR-2424
11,97,87- *ON THE EFFECTS OF*W131	1N112FD3N28 *ECT OF AEROELASTI	*	*2.5	*ARC -	*CKWELL INTERNATION	O*VOLUME 02
289-1 /*AEROELASTICITY O *	*CITY OF THE ORBIT	*	*	*11-F00T, 9-F00	)+NAL	*OCT., 1980
97SWT - *F THE SPACE SHUTT*	*ER VERTICAL TAIL	*	*	*T. 8-FOOT, UN1	*M. M. MANN	*
OA126A,B,C*LE ORBITER VERTIC*	*ON THE LATERAL DI	*	*	*TARY WIND TUNK	I*-DMS	*
CR-160,507*AL TAIL USING A O*	*RECTIONAL STABILI	*	*	*EL	*	*
*.O3-SCALE MODEL (*	*TY, RUDDER CONTRO	*	*	*9-FOOT BY 7-FO	<b>)</b> *	*
*47-0) IN THE NASA*	*L CHARACTERISTICS	*	*	*OT SUPERSONIC	*	*
*AMES UNITARY WIN *	*AND TAIL LOADS O	*	*	*WIND TUNNEL (U	j* '	*
*D TUNNELS (OA126A*	*F THE ORBITER	*	*	*NITARY)	*	*
*/B) *	*	*	*	*	*	*
*	*	*	*	*	*	*
	102 ORBITER C*DETERMINE EFFECT			*ROCKWELL/	*S. R. HOULIHAN/R	
11,97,87- *ON THE EFFECTS OF*ONF	IGURATION 47-0*OF AEROELASTICITY	<b>*</b>	*0.6 -	*ARC -	*CKWELL	*VOLUME 03
289-1 /*AEROELASTICITY O *	*OF ORBITER VERTI	*	*3.5	•	D*W. ANDERSON/ARC	*OCT., 1980
DA126A,B,C*F THE SPACE SHUTT*	*CAL TAIL ON LATER		*	*T, 8-FOOT, UNI		*
CR-160,508*LE ORBITER VERTIC*	*AL DIRECTIONAL ST		*		N+G. G. MCDONALD	*
*AL TAIL USING A O*	*ABILITY, RUDDER C		*	*EL	*-DMS	*
*.03-SCALE MODEL (*	*ONTROL CHARACTERI		*	*	*	*
*47-0) IN THE NASA*	*STICS AND TAIL LO		*	*	*	*
*AMES UNITARY WIN *	*ADS OF THE ORBITE		*	*	*	*
*D TUNNELS (DA126A*	*R VEHICLE. THREE		*	*	* '	*
*BC) *	*TAILS (RIGID, PRE		*	*	*	*
* *	*SSURE INSTRUMENTE		*	*	*	*
* *	*D, AND ELASTIC) W	I*	*	*	*	*
*	*ERE USED.	*	*	*	*	*
* *	*	*	*	*	*	*

ARC - *A V IPWT - *DY 207 LG2 /*BIL A124 *LD M-X *ORY TP1186 *SHL * ** ** ** ** ** ** ** ** ** ** ** **	REPORT TITLE  WIND TUNNEL ST Y OF THE APPLICATION ILITY OF FAR-FI O SONIC-BOOM THE RY TO THE SPACE HUTTLE ORBITER  ESULTS OF TESTS F A 0.0175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) OHE SPACE SHUTTL ORBITER TO DET WINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	60-0; LINE	*TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R * * VE*DETERMI *NT HEAT	TING ON L ELAGE AND	* * * PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TYPE OF TEST FORCE	* 0.0004 / *2.8 - *4.14 *	LE* TEST GE* AGEN  / *LARC *LARC *UNITAR *IND TUI *  *  *  /*ROCKWE *AEDC *HYPERSI	NCY / / RY PLAN W UNNEL	* T  * *   * H. W  * J. W  * G. G  * - DMS  * * J. W  * S. R  N*G. R	G. MCDONALD S . CUMMINGS/R R. HOULIHAN R. LUTZ	*JUNE, * * * * * RI *DMS-DR-	ATIONS MENTS  -2426 1978
ID * F	WIND TUNNEL ST Y OF THE APPLIC ILITY OF FAR-FI D SONIC-BOOM TH RY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO JUPLE WIND TUNN MODEL (60-0) O ORBITER TO DET MINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	TESTED  B ORBITER  60-0; LINE	*TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R ** ** ** ** ** ** ** ** ** ** ** **	TEST URPOSE ERMINE AP ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	* * * PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TYPE OF TEST FORCE	*MODEL  * SCAL  *MACH RANG  * 0.0004 /  *2.8 -  *4.14  *  *  *  *  *  *  *  *  *  *  *  *  *	LE* TEST GE* AGEN  / *LARC *LARC *UNITAR *IND TUI *  *  *  /*ROCKWE *AEDC *HYPERSI	NCY  / RY PLAN W UNNEL  ELL/ SONIC WIN	* T  * *   * H. W  * J. W  * G. G  * - DMS  * * J. W  * S. R  N*G. R	TEST DMS PERSONNEL	*PUBLICA *OR COMM *ORS-DR- *UUNE, * * * * *	 IC ATIONS MENTS  -2426 1978
ID * F	WIND TUNNEL ST Y OF THE APPLIC ILITY OF FAR-FI D SONIC-BOOM TH RY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO JUPLE WIND TUNN MODEL (60-0) O ORBITER TO DET MINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	TESTED  B ORBITER  60-0; LINE	*TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R ** ** ** ** ** ** ** ** ** ** ** **	TEST URPOSE ERMINE AP ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	* * * PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TYPE OF TEST FORCE	*MODEL  * SCAL  *MACH RANG  * 0.0004 /  *2.8 -  *4.14  *  *  *  *  *  *  *  *  *  *  *  *  *	LE* TEST GE* AGEN  / *LARC *LARC *UNITAR *IND TUI *  *  *  /*ROCKWE *AEDC *HYPERSI	NCY  / RY PLAN W UNNEL  ELL/ SONIC WIN	* T  * *   * H. W  * J. W  * G. G  * - DMS  * * J. W  * S. R  N*G. R	TEST DMS PERSONNEL	*PUBLICA *OR COMM *ORS-DR- *UUNE, * * * * *	 IC ATIONS MENTS  -2426 1978
ID * F	WIND TUNNEL ST Y OF THE APPLIC ILITY OF FAR-FI D SONIC-BOOM TH RY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO JUPLE WIND TUNN MODEL (60-0) O ORBITER TO DET MINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	TESTED  B ORBITER  60-0; LINE	*TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R ** ** ** ** ** ** ** ** ** ** ** **	TEST URPOSE ERMINE AP ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	* * * PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TYPE OF TEST FORCE	*MODEL  * SCAL  *MACH RANG  * 0.0004 /  *2.8 -  *4.14  *  *  *  *  *  *  *  *  *  *  *  *  *	LE* TEST GE* AGEN  / *LARC *LARC *UNITAR *IND TUI *  *  *  /*ROCKWE *AEDC *HYPERSI	NCY  / RY PLAN W UNNEL  ELL/ SONIC WIN	* T  * *   * H. W  * J. W  * G. G  * - DMS  * * J. W  * S. R  N*G. R	TEST DMS PERSONNEL	*PUBLICA *OR COMM *ORS-DR- *UUNE, * * * * *	 IC ATIONS MENTS  -2426 1978
ID * F	WIND TUNNEL ST Y OF THE APPLIC ILITY OF FAR-FI D SONIC-BOOM TH RY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO JUPLE WIND TUNN MODEL (60-0) O ORBITER TO DET MINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	TESTED  B ORBITER  60-0; LINE	* PU  *TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R *NE*DETERMI *NT HEAT *ER FUSE	URPOSE ERMINE AP ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	* PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TEST	* SCAL *MACH RANG * 0.0004 / *2.8 - *4.14 * * * * ** ** ** ** ** ** *	GE* AGEN / *LARC *LARC *UNITAR *IND TU * * / *ROCKWE *AEDC *HYPERS	NCY  / RY PLAN W UNNEL  ELL/ SONIC WIN	* T  * *   * H. W  * J. W  * G. G  * - DMS  * * J. W  * S. R  N*G. R	TEST DMS PERSONNEL	*PUBLICA *OR COMM *ORS-DR- *UUNE, * * * * *	ATIONS MENTS  -2426 1978
ID * F	WIND TUNNEL ST Y OF THE APPLIC ILITY OF FAR-FI D SONIC-BOOM TH RY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO JUPLE WIND TUNN MODEL (60-0) O ORBITER TO DET MINE EFFECTS OF	* U*140A/B A* E* IE*  * * * * * * * * * * * * * * *	TESTED  B ORBITER  60-0; LINE	* PU  *TO DETE *ICABILI *FIELD S *THEORY *CE SHUT *R *NE*DETERMI *NT HEAT *ER FUSE	URPOSE ERMINE AP ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	* PPL*F( AR-* OM * SPA* ITE* * ULE*HI	TEST	* MACH RANG * 0.0004 / *2.8 - *4.14 * * * * ** ** ** ** ** ** *	GE* AGEN / *LARC *LARC *UNITAR *IND TU * * / *ROCKWE *AEDC *HYPERS	NCY  / RY PLAN W UNNEL  ELL/ SONIC WIN	*H. W * J. W *G. G *-DMS * * *J. W. *S. R	PERSONNEL	*OR COMM	MENTS  -2426 1978
PWT - *DY 207 LG2 /*BIL A124 *LD M-X *ORY TP1186 *SHL  EDC - *RES WTB - *OF 41B-V2C /*THI H103B *COL *R-167,675*L * *THE *E C *RMI *SUR *SUR *HYF *UNN	Y OF THE APPLICATION OF THE SPACE HUTTLE ORBITER  ESULTS OF TESTS F A 0.0175-SCAL HIN-SKIN THERMO MODEL (60-0) OF HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	EA* E*  *  *  *  *  *  *  *  *  *  *  *  *	60-0; LINE	*ICABILI *FIELD S *THEORY *CE SHUT *R * ** ** ** ** ** ** ** ** ** ** ** *	ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	AR-* OM * SPA* ITE*  * ULE*HI		*2.8 - *4.14 * * * *25* 0.0175 / *7.96 - *8.0	*LARC *UNITAR *IND TUI *  *  *  *  *ROCKWE *AEDC *HYPERSI	TRY PLAN WUNNEL  ELL/ SONIC WIN	*. J. W*J. W *G. G *-DMS * *J.W. *S. R N*G. R	. MACK/LARC W. BALL G. MCDONALD S . CUMMINGS/R R. HOULIHAN R. LUTZ	*JUNE, * * * * * RI *DMS-DR-	1978
PWT - *DY 207 LG2 /*BIL A124 *LD M-X *ORY TP1186 *SHL  EDC - *RES WTB - *OF 41B-V2C /*THI H103B *COL *R-167,675*L * *THE *E C *RMI *SUR *SUR *HYF *UNN	Y OF THE APPLICATION OF THE SPACE HUTTLE ORBITER  ESULTS OF TESTS F A 0.0175-SCAL HIN-SKIN THERMO MODEL (60-0) OF HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	EA* E*  *  *  *  *  *  *  *  *  *  *  *  *	60-0; LINE	*ICABILI *FIELD S *THEORY *CE SHUT *R * ** ** ** ** ** ** ** ** ** ** ** *	ITY OF FA SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	AR-* OM * SPA* ITE*  * ULE*HI		*2.8 - *4.14 * * * *25* 0.0175 / *7.96 - *8.0	*LARC *UNITAR *IND TUI *  *  *  *  *ROCKWE *AEDC *HYPERSI	TRY PLAN WUNNEL  ELL/ SONIC WIN	*. J. W*J. W *G. G *-DMS * *J.W. *S. R N*G. R	. MACK/LARC W. BALL G. MCDONALD S . CUMMINGS/R R. HOULIHAN R. LUTZ	*JUNE, * * * * * RI *DMS-DR-	1978
207 LG2 /*BIL A124 *LD M-X *ORY TP1186 *SHL LEDC - *RES WTB - *OF '41B-V2C /*THI H103B *COL '*R-167,675*L M *THE *E C *RMI *SUF *IN *HYF *UNN	ILITY OF FAR-FID SONIC-BOOM THE SPACE HUTTLE ORBITER  ESULTS OF TESTS F A 0.0175-SCALHIN-SKIN THERMODUPLE WIND TUNN MODEL (60-0) ORBITER TO DET  MINE EFFECTS OF	E* IE*  *  *  *  *  *  *  *  *  *  *  *  *		*FIELD S *THEORY *CE SHUT *R * *NE*DETERMI *NT HEAT *ER FUSE	SONIC-BOO TO THE S TTLE ORBI INE TURBU TING ON L ELAGE AND	OM * SPA* ITE*  * ULE*HI	IEAT-TRAN	*4.14 * * * * * *IS* 0.0175 / *7.96 - *8.0	*UNITAR *IND TUI *  *  *  *  *  *ROCKWE *AEDC *HYPERSI	RY PLAN W UNNEL ELL/ SONIC WIN	W*J. W *G. G *-DMS * * * * *J.W. *S. R N*G. R	W. BALL G. MCDONALD S . CUMMINGS/R R. HOULIHAN R. LUTZ	* * * * * RI *DMS-DR-	-2427
A124 *LD M-X *ORY TP1186 *SHL * ** ** ** ** ** ** ** ** ** ** ** **	O SONIC-BOOM THRY TO THE SPACE HUTTLE ORBITER ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) ORBITER TO DET MINE EFFECTS OF	E		*THEORY  *CE SHUT *R * *E*DETERMI *NT HEAT *ER FUSE	TO THE S TTLE ORBI  INE TURBU TING ON L ELAGE AND	SPA* ITE*  * ULE*HI	IEAT-TRAN	* * * *S* 0.0175 / *7.96 - *8.0	*IND TUE  *  *  *  *  *  *ROCKWE  *AEDC  *HYPERSE	UNNEL  ELL/ SONIC WIN	*G. G *-DMS * * *J.W. *S. R N*G. R	G. MCDONALD S . CUMMINGS/R R. HOULIHAN R. LUTZ		
M-X *ORY TP1186 *SHU  * * * *EDC - *RES WTB - *OF *41B-V2C /*THJ WH103B *COU R-167,675*L M *THE *E C *RMJ *SUF *SUF *UNN	RY TO THE SPACE HUTTLE ORBITER  ESULTS OF TESTS F A O.0175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	* * * * * * * * * * * * * * * * * * * *		*CE SHUT *R * * * *VE*DETERMI *NT HEAT *ER FUSE	TTLE ORBI INE TURBU TING ON L ELAGE AND	ITE*  * ULE*HI	IEAT-TRAN	*7.96 - *8.0	*AEDC *HYPERS	ELL/ SONIC WIN	* *J.W. *S. R N*G. R	. CUMMINGS/R R. HOULIHAN R. LUTZ		
**  **  **  **  **  **  **  **  **  **	ESULTS OF TESTS F A O.O175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	* 5 *MODEL 6 E*S VL7O 1 * IE* 1F* . *		* NE*DETERMI *NT HEAT *ER FUSE	TING ON L ELAGE AND	LOW*	IEAT-TRAN	*7.96 - *8.0	*AEDC *HYPERS	SONIC WIN	*S. R N*G. R	R. HOULIHAN R. LUTZ		
LEDC - *RES LWTB - *OF 141B-V2C /*THJ 14103B *COL 18-167,675*L M *THE *E C *RMJ *SUF *IN *HYF *UNN	F A O.0175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	E*S VL70   *  E*  F* . *		*NT HEAT *ER FUSE	TING ON L ELAGE AND	LOW*	HEAT-TRAN	*7.96 - *8.0	*AEDC *HYPERS	SONIC WIN	*S. R N*G. R	R. HOULIHAN R. LUTZ		
WTB - *OF V41B-V2C /*THI WH103B *COL R-167,675*L M *THE *E C *RMI *SUR *IN *HYF *UNN	F A O.0175-SCAL HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	E*S VL70   *  E*  F* . *		*NT HEAT *ER FUSE	TING ON L ELAGE AND	LOW*	HEAT-TRAN	*7.96 - *8.0	*AEDC *HYPERS	SONIC WIN	*S. R N*G. R	R. HOULIHAN R. LUTZ		
**************************************	HIN-SKIN THERMO DUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	) *  E*  F*   *	0-000140C	*ER FUSE	ELAGE AND	-		*8.0	*HYPERS	SONIC WIN	N+G. R	R. LUTZ	*UAN., * *	1984
#1103B *COL R-167,675*L M *THE *E C *RMI *SUR *IN *HYF *UNN	OUPLE WIND TUNN MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	IE* IF* . * 'E*				D W* * *		<del>-</del>					*	
R-167,675*L M *THE *E C *RM1 *SUF *IN *HYF *UNN	MODEL (60-0) O HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	)F* . * 'E*		* ING 501 *	RFACE	*		*	*D 1000	NEL (B)	*-DM.	5	*	
*THE *E C *RM1 *SUF *IN *HYF *UNN	HE SPACE SHUTTL ORBITER TO DET MINE EFFECTS OF	. * 'E*		*		*		*	*				<b>=</b>	
*E C *RM1 *SUF *IN *HYF *UNN	ORBITER TO DET	E*		*		_		***			*		<u>.</u>	•
*RM] *SUF *IN *HYF *UNN	MINE EFFECTS OF			-		*		<b>∓</b> 	*		*		* .	
*SUF *IN *HYF *UNN		-	•	<b>∓</b>		*		*	*		*		*	
*IN *HYF *UNN	MEMUL RUDGISSEL			<b>∓</b>		*		** ±	<b>+</b>		*		*	
*HYF *UNN	THE AEDC VKF			÷		*		*	<b>∓</b>		<b>*</b>		*	
*UNN	PERSONIC WIND			*		*		*	*		*		*	
	NNEL B (OH103			*		*		*	*		*		*	
•	•	*		*		*		*	*		*		*	
*		*		*		*		*	*		*		*	
ERC - *WIN	IND TUNNEL TEST	S*84-0TS	S035 SCA	L*TO OBTA	AIN PRESS	SUR*P	RESSURE	* .035 /	/ *ROCKWE	ELL/	*P.R	. CARROL/RI,	. W*DMS-DR	-2428
	THE 0.035-SCA							*2.5 -	*LERC			ERSTENMAIER/		
	INTEGRATED SP			H*INITY 0	OF PROTUB	BER∗		*3.5		10-F00T			*FEB.,	1981
H11 *CE	SHUTTLE VEHIC	L*UTTLE	VEHICLE	*ANCES A	AND CONNE	ECT*		*		_		R. HOULIHAN	*	
	84-OTS IN THE				RDWARE ON			*	*D TUNN			W. KLUG	*	
	SA/LEWIS 10 X 1				ITER, EXTE			*	*		*-DMS	<b>்</b>	*	
	OOT SUPERSONIC				K AND SOL			*	*		*		*	
	[ND TUNNEL (IH	1*			BOOSTER			*	*		*		*	
*1)	1	* .			R TO DETE			*	*		*		*	
*		*			RODYNAMIC			*	*		*		*	
*		*			RATES IN	.1 T*		*	*		*		*	
<b>∓</b>		*		*HESE AR	₹EAS.	*		*	*		*		*	

				WIND TUNNEL TE	ST / DMS DATA	PROCESSING			318
									318
TEST ID	* * * * * * * * * * * * * * * * * * *	* * TITLE *	CONFIGURATIONS TESTED	* TEST * PURPOSE	* * TYPE OF * TEST	*MODEL  * SCALE  *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
LERC	- *WIND TUNNE	EL TESTS*8	4-0TS035 SCAL	*TO OBTAIN PRE	SSUR*PRESSURE	* .035 /	*ROCKWELL/	*P.R. CARROL/RI.	W*DMS-DR-2428
10SWT			MODEL OF THE IN			•	*LERC! -	*. GERSTENMAIER	
045	_		EGRATED SPACE SH			*3.5	*10 BY 10-FOOT	*SA	*FEB., 1981
IH11	*CE SHUTTLE	VEHICL*U	TTLE VEHICLE	*ANCES AND CON	NECT*	*	*SUPERSONIC WIN	N*S. R. HOULIHAN	*
CR-160.	524*E 84-0TS 1	IN THE N*		*ING HARDWARE	ON T*	*	*D TUNNEL	∗G. W. KLUG	*
	*ASA/LEWIS	10 X 10*		*HE ORBITER, EX	TERN*	*	*	*-DMS	*
	*-FOOT SUPE	ERSONIC *		*AL TANK AND S		*	*	*	*
	*WIND TUNNS	EL (IH1*		*ROCKET BOOSTE		*	*	*	*
	*1)	*		*N ORDER TO DE	TERM*	*	*	*	*
	*	*		*INE AERODYNAM	IC H*	*	*	*	*
	*	*		*EATING RATES	IN T*	*	*	*	*
	*	*		*HESE AREAS.	*	*	*	*	*
	*	*		*	*	*	*	*	*
LERC 10SWT 045 IH11	- *OF THE O.( /*LE INTEGR/ *CE SHUTTLE 525*E 84-OTS : *ASA/LEWIS *-FOOT SUP( *WIND TUNN( *1) *  *  *  - *WIND TUNN( - *OF THE O.( /*LE INTEGR/	D35-SCA *E ATED SPA*TE E VEHICL*L IN THE N* 10 X 10* ERSONIC * * * * * * * * * * * * * * * * * * *	14-OTSO35 SCAL : MODEL OF THE IN EGRATED SPACE SH ITTLE VEHICLE	**E DATA IN THE  **INITY OF PROT  **ANCES AND CON  **ING HARDWARE  **HE ORBITER, EX  **AL TANK AND S  **ROCKET BOOSTE  **N ORDER TO DE  **INE AERODYNAM  **TO OBTAIN PRE  **TO OBTAIN PRE  **TO OBTAIN PRE  **INITY OF PROT  **ANCES AND CON  **ING HARDWARE  *HE ORBITER, EX  **AL TANK AND S  **ROCKET BOOSTE  **N ORDER TO DE  **INE AERODYNAM	VIC* UBER* NECT* ON T* TERN* OLID* R I * TERM* IC H* IN T* * * * * * * * * * * * * * * * * * *	*2.5 - *3.5 * * * * * * * * * *	*D TUNNEL  *  *  *  *  *  *  *  *  *  *ROCKWELL/ *LERC - *10 BY 10-FOOT	N*S. R. HOULIHAN *G. W. KLUG *-DMS * * * * * * * * * * * * * * * * * * *	/NA*VOLUME 03     *FEB., 1981     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *     *    *     *     *     *     *     *     *     *     *     *     *
	*	*		*EATING RATES	IN T*	*	*	*	*
	*	*		*HESE AREAS.	*	*	*	*	*
	*	*		*	*	*	*	*	* .

						WIND	TUNNEL	. TEST	/	DMS DATA	PROCE	SSING					319
TEST ID	* *	REPORT	TITLE	* *	CONFIGURATIONS TESTED	* *	TES PURPO		*	TYPE OF TEST		L SCALE RANGE		* * *	COGNIZANT TEST DMS PERSONNEL	* BASI *PUBLICA *OR COMM	TIONS
RC	- +7	HIN SKI	N HEAT	TR+0	T FLAT PLATE	*THE	PURPOS	E OF	TH∗H	IEAT-TRAN	S*O.04	,	*ROCKWELL/	*J.W	. CUMMINGS /R	:I*DMS-DR-	2429
. SHWT	- */	NSFER TI	ESTS OF	A+5	BOTS	*1S	TEST WA	S TO	OB*		*5.3	-	*ARC -		. OKUNO /ARC		
39	/*5	SIMULATE	SPACE	*		*TAI	N AEROS	IMANY	C *		*5.3		*3.5-FOOT HYP	ER*S.	R. HOULIHAN	*	
H5 1B		SHUTTLE (				*INT	ERFEREN	ICE HE	*TA		*		*SONIC WIND T	UN∗G.	W. KLUG	*	
२-167,3		E SOLID I					DATA (		_		*		*NEL	. *-DM	IS	*	
		STER/ET				*T A	ND SRB	IN TH	IE *		*		*	*		*	
		3-TS) IN					YTIMIX		-		*		*	*		*	
	*/	'ARC 3.5	FOOT H	YP*		*FOR	RWARD ET	/SRB	AT*		*		*	*	•	*	
		RSONIC 1		NN*		*TAC	HMENT A	ND ON	T*		*		*	*		*	
	* 5	L (IH511	3)	*		*HE	ATTACH	STRUC	*UT		*		*	*		*	
	*			*		*RE.			*		*		*	*		*	
	*			*		*			*		*		*	*		*	
RC	- *F	RESULTS (	OF AN I	NV+O	V102(MODEL 39-0	) *VER	RIFICATI	ON OF	L*F	ORCE	*0.6	-	*ROCKWELL/	*R.H	I.MULFINGER/RI	*DMS-DR-	2430
TT	- *	STIGATIO	א סד אכ	ER*		*ONG	ITUDINA	L AND	L*		*1.3		*LARC -	<b>*</b> \$.	R. HOULIHAN	*VOLUME	01
:6	/*	FY SHUT	TLE ORB	IT*		*ATE	RAL/DIF	ECTIO	NA*		*		*16-FODT TRAN	SO∗M.	M. MANN	*MARCH,	1981
270A	* E	R AERO-	CHARACT	ER*		*L F	ORCE AN	ID D	*		*		*NIC TUNNEL	* - DM	IS	*	
t-160,8	17+1	STICS A	ND EXAM	IN*		*M0M	IENT CHA	RACTE	RI*		*		*	*		*	
	* 6	TRANSO	NIC BLO	CK*		*STI	CS, CON	ITROL	SU*		*		*	*		*	
	* #	GE AND !	SHOCK R	EF*		*RFA	CE EFFE	CTIVE	NE*		*		*	*		*	
	*[	ECTION I	EFFECTS	*		*55	AND HIN	IGE	*		*		*	*		*	
	*t	JTILIZIN	O. NA E	5-*		*MOM	IENTS AN	ID EXA	MI*		*		*	*		*	
	*5	CALE HI	-FIDELI	TY*		*NE	THE EFF	ECT 0	F *		*		*	*		*	
	* F	REMOTE CO	ONTROL	M *		*TUN	INEL BLO	CKAGE	A*		*		*	*		*	
	*(	DEL(39-0	) IN T	HE*		*ND	SHOCK F	EFLEC	T-*		*		*	*		*	
	*L	ANGLEY I	RESEARC	H *		*ION	IS ON TH	IESE C	HA*		*		*	*		*	
	*(	ENTER 10	3-FT. T	RA*		*RAC	TERISTI	CS	*		*		* .	*		*	
	*1	SONIC W	IND TUN	NE*		*			*		*		*	*		*	
	*L	. DA270A		*		*			*		*		*	*		*	
	*			*		*			*		*		*	*		*	

				WIND TU	INNEL TEST	/	DMS DATA	PROCES	SSING					320
		*	· •	*		*		*MODEI		 *	*	COGNIZANT	* BASI	С
TEST *		*	CONFIGURATIONS	*	TEST	*	TYPE OF		_	* TESTING	*	TEST DMS	*PUBLICA	TIONS
	REPORT TITLE	*	TESTED		URPOSE		TEST			* AGENCY	*	PERSONNEL	*OR COMM	IENTS
												5111055/51	. Duc. DD	0.400
	RESULTS OF AN IN		/102(MODEL 39-0				ORCE	*0.6		*ROCKWELL/		I.MULFINGER/RI		
	ESTIGATION TO VE				DINAL AND	_		*1.3		*LARC -		R. HOULIHAN	*VOLUME *MARCH.	
•	IFY SHUTTLE ORB				./DIRECTIO			*		*16-FOOT TRANS			*MARCH,	198
	ER AERO-CHARACTI			*L FORC		*		*		*NIC TUNNEL	*-DN	15	*	
-	ISTICS AND EXAM				CHARACTE			*		<b>*</b>	*		-	
	TRANSONIC BLOC				CONTROL			*		<b>*</b>	*		<b>.</b>	
	AGE AND SHOCK RI				EFFECTIVE								-	
	LECTION EFFECTS			*SS AND		*		*		*	*			
	JTILIZING AN .O.	-			S AND EXA			*		<b>*</b> 	*		• •	
	SCALE HI-FIDELI				EFFECT C			*		*	*		*	
	REMOTE CONTROL !				BLOCKAGE			*		*	*		*	
	DDEL(39-0) IN T				CK REFLEC			*		*	*		*	
	LANGLEY RESEARCH				N THESE C	JHA*		*		<b>*</b>	*		*	
	CENTER 16-FT. TI			*RACTER	RISTICS	*		*		*	*		*	
	NSONIC WIND TUN	AE*		*		*		*		*	*		*	
*	L 0A270A	*		*		*		*		*	*		*	
*		*		*	<b></b>	* .		*		*	*		*	
	RESULTS OF AN II		V102(MODEL 39-0				ORCE	*0.6		*ROCKWELL/		H.MULFINGER/RI		
	ESTIGATION TO VI		•		JDINAL AND			*1.3		*LARC -	_	R. HOULIHAN	*VOLUME	-
	IFY SHUTTLE ORB				_/DIRECTIO			*		*16-FOOT TRANS			*MARCH,	198
	ER AERO-CHARACTI			*L FORC		*		*		*NIC TUNNEL	*-D!	MS	*	
•	ISTICS AND EXAM				CHARACT			*		*	*			
	E TRANSONIC BLO				, CONTROL			*		*	*		*	
	AGE AND SHOCK R				EFFECTIVE			*		*	*		*	
	LECTION EFFECTS			*SS AND		*		*		*	*		*	
	UTILIZING AN .O				TS AND EXA			*		*	*		*	
	SCALE HI-FIDELI				E EFFECT (			*		<b>*</b>	*		<b>∓</b>	
	REMOTE CONTROL I				BLOCKAGE			*		*	*		<b>∓</b>	•
	ODEL(39-0) IN T				OCK REFLEC			*		*	*		# 	
	LANGLEY RESEARC				ON THESE (	CHA*		*		*	*		*	
	CENTER 16-FT. T			*RACTE	RISTICS	*		*		*	*		*	
	NSONIC WIND TUN	NE*		*		*		*		*	*		<b>∓</b>	
*	L 0A270A	*		*		*		*		*	*		<b>*</b>	
*		*		*		*		*		*	*		*	

)

	)			~	)			
			WIND TUNNEL	TEST / DMS D	DATA PROCESSI	 NG		321
TEST ID	* * REPORT TITLE	*  * CONFIGURAT  * TESTED				* ALE* TESTING NGE* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
	- *TEST RESULTS FR	::::::::::::::::::::::::::::::::::::::	2C12M+TO OBTAIN C	ONVECT*HEAT-1	RANS* 0.0175	/ *ROCKWELL/	*J.W.CUMMINGS/R	I *DMS-DR-2431
	- +THE NASA/ROCKEL				*3.01 -	*AEDC -	*K.W.NUTT/AEDC-	
	/*INTERNATIONAL S				*4.02	*SUPERSONIC W	•	*APRIL, 1980
185	*ACE SHUTTLE INT				*	*D TUNNEL (A)		*
-151,/	93*RATED VEHICLE 1		*HUTTLE INTE		*	*	+G. W. KLUG	*
	*T USING A 0.017		*VEHICLE DUR		* *	*	*-DMS	*
	*SCALE MODEL (60 *TS) CONDUCTED 1		*IMULATED FI *D SECOND ST		*	<b>.</b>	*	*
	*THE AEDC-VKF TU		*NDITIONS OF		*			*
	*EL A (1H85)	*	*LIGHT PROFI		*	*	<b>*</b>	*
	*	*	*CIGHT FROTT	-L +	*	*	•	*
DC	- *TEST RESULTS FR	OM*OTS-T38S26R6	2C12M*TO OBTAIN C	NVECT*HEAT-1	PANS* 0 0175	/ *ROCKWELL/	*J.W.CUMMINGS/R	I *DMS-DR-2431
	- *THE NASA/ROCKEL				*3.01 -	*AEDC -	*K.W.NUTT/AEDC-	
	/*INTERNATIONAL				*4.02	*SUPERSONIC W		*APRIL. 1980
185	*ACE SHUTTLE INT				*	*D TUNNEL (A)	•	*
	94*RATED VEHICLE T		*HUTTLE INTE		*	*	*G. W. KLUG	*
•	*T USING A 0.017		*VEHICLE DUR		*	*	*-DMS	*
	*SCALE MODEL (60	)-O*	*IMULATED FI		*	*	*	*
	*TS) CONDUCTED 1	N *	*D SECOND ST	AGE CO*	*	*	*	*
	*THE AEDC-VKF TU	INN*	*NDITIONS OF	THE F*	*	*	*	*
	*EL A (IH85)	*	*LIGHT PROFI	_E *	*	*	*	*
	*	*	*	*	*	*	*	*
	- *TEST RESULTS FR				RANS* 0.0175	/ *ROCKWELL/	*J.W.CUMMINGS/R	I *DMS-DR-2431
	- *THE NASA/ROCKEL				*3.01 -	*AEDC -	*K.W.NUTT/AEDC-	
1A-W5			M16W1+-RATE DISTR		*4.02	*SUPERSONIC W		*APRIL, 1980
85	*ACE SHUTTLE INT				*	*D TUNNEL (A)		* *
-151,7	95*RATED VEHICLE T		*HUTTLE INTE		*	*	*G. W. KLUG	*
	*T USING A 0.017		*VEHICLE DUR		*	*	*-DMS	*
	*SCALE MODEL (60		*IMULATED FI		*	#	*	*
	*TS) CONDUCTED I		*D SECOND ST		*	*	<b>∓</b>	*
	*THE AEDC-VKF TU	'NN*	*NDITIONS OF		*	# 	*	
	*EL A (IH85) *	<b>∓</b>	*LIGHT PROFII	-⊏ ₹	*	₹	<b>∓</b>	*

				WIND 1	UNNEL TES	r /	DMS DATA	PROCES	SSING					322
	*	*		*		*		*MODE!	L .	*	*	COGNIZANT	* BASI	C
TEST	*	*	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICA	ATIONS
ID	* REPORT TITE	.E *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
			TS-T38526B62C12N				HEAT-TRANS	* 0.0						
			6W116E52V8R18F10					*3.01				W.NUTT/AEDC-VKF		
			T-T38B62C12M16W1					*4.02		*SUPERSONIC WIN			*APRIL,	1980
IH85			6E52V8R18F10		N THE SPACE	_		*		*D TUNNEL (A)		E. VAUGHN	*	
CR-151,79	6*RATED VEHICLE				_E INTEGRA			*		*		W. KLUG	*	
	*T USING A O.				CLE DURING	_		*		*	*-DI	MS	*	
	*SCALE MODEL (				ATED FIRST			*		*	*		*	
	*TS) CONDUCTED	) IN *		*D SEC	COND STAGE	CO*		*		*	*		*	
	*THE AEDC-VKF	TUNN*		*NDIT	ONS OF TH	E F*		*		*	*		*	
	*EL A (IH85)	*		*LIGH	r PROFILE	*		*		*	*		*	
	*	*		*		*		*		*	*		*	
			)TS-T38S26B62C12N					* 0.0	175 /	*ROCKWELL/				
SWTA -	* *THE NASA/ROCK	<b>(ELL *1</b>	16W116E52V8R18F10	O*IVE +	HEAT-TRANS	FER*		*3.01	-	*AEDC -	*K.1	W.NUTT/AEDC-VKF	F*VOLUME	05
V41A-W5	/*INTERNATIONAL	. SP *0	T-T38862C12M16W	1*-RATE	E DISTRIBU	*O17		*4.02		*SUPERSONIC WIN	1*/SI	H	*MAY,	1980
IH85	*ACE SHUTTLE	NTEG* 1	16E52V8R18F10	*NS 01	N THE SPACE	E S*		*		*D TUNNEL (A)	*J.	E VAUGHN	*	
CR-151,79	7*RATED VEHICLE	TES*		*HUTTI	E INTEGRA	TED*		*		*	∗G.	W. KLUG	*	
	*T USING A O.	175-*		*VEHI	CLE DURING	S *		*		* .	*-DI	MS	*	
	*SCALE MODEL	60-0*		*IMUL/	ATED FIRST	AN*		*		*	*		*	
	*TS) CONDUCTED	* NI (		*D SEC	COND STAGE	CO*		*		*	*		*	
	*THE AEDC-VKF	TUNN*		*NDIT	IONS OF TH	E F*		*		*	*		*	
	*EL A (IH85)	*		*LIGH	r PROFILE	*		*		*	*		*	
	*	*	4	*		*		*		*	*		*	
AEDC -	*TEST RESULTS	FROM*C	TS-T38526B62C12	M*TO OF	STAIN CONV	ECT*	HEAT-TRANS	* 0.0	175 /	*ROCKWELL/	*J.1	W.CUMMINGS/RI	*DMS-DR	-2431
SWTA -	*THE NASA/ROCK	KELL *1	16W116E52V8R18F1	O*IVE I	HEAT-TRANS	FER*		*3.01	-	*AEDC -	*K.1	W.NUTT/AEDC-VKI	F*VOLUME	06
V41A-W5	/*INTERNATIONAL	. SP *C	T-T38B62C12M16W	1*-RATI	E DISTRIBU	*OIT		*4.02		*SUPERSONIC WIN	N*/SI	Н	*MAY.	1980
IH85	*ACE SHUTTLE	INTEG* 1	16E52V8R18F10	*NS 0	N THE SPAC	E S*	•	*		*D TUNNEL (A)	∗Ū.	E. VAUGHN	*	
CR-151,79	8*RATED VEHICL	TES*		*HUTTI	LE INTEGRA	TED*		*		*	*G.	W. KLUG	¥	
•	*T USING A O.	175-*		*VEHI	CLE DURING	S *		*		*	*-D	MS	*	
	*SCALE MODEL				ATED FIRST	_		*		*	*		*	
	*TS) CONDUCTED	* NI C		*D SE	COND STAGE	CO*		*		*	*		*	
	*THE AEDC-VKF	TUNN*			IONS OF TH			*		*	*		*	
	*EL A (1H85)	*			T PROFILE	*		*		*	*		*	
	•												_	

ID * REPORT TITLE * TESTED * PURPOSE * TEST *MACH RANGE* AGENCY * PERSONNEL *OR CO	ICATIONS OMMENTS DR-2431 ME 07 1980
ID * REPORT TITLE * TESTED * PURPOSE * TEST *MACH RANGE* AGENCY * PERSONNEL *OR CO  EDC - *TEST RESULTS FROM*OTS-T38S26B62C12M*TO OBTAIN CONVECT*HEAT-TRANS* O.0175 / *ROCKWELL/ *J.W.CUMMINGS/RI *DMS-I WTA - *THE NASA/ROCKELL *16W116E52V8R18F10*IVE HEAT-TRANSFER* *3.01 - *AEDC - *K.W.NUTT/AEDC-VKF*VOLUI 41A-W5 /*INTERNATIONAL SP **OT-T38B62C12M16W1*-RATE DISTRIBUTIO* *4.02 *SUPERSONIC WIN*/SH *WAY, H85 *ACE SHUTTLE INTEG*16E52V8R18F10 *NS ON THE SPACE S* * D TUNNEL (A) *J. E. VAUGHN * R-151,799*RATED VEHICLE TES* *HUTTLE INTEGRATED* * * *CALE MODEL (60-0* *IMULATED FIRST AN* * * *DMS *  **SCALE MODEL (60-0* *IMULATED FIRST AN* * * * *DMS *  **TUSING A 0.0175-* *VEHICLE DURING S * * * *-DMS *  **THE AEDC-VKF TUNN* *NDITIONS OF THE F* * * * *  **HE AEDC-VKF TUNN* *NDITIONS OF THE F* * * * *  **EL A (IH85) * *LIGHT PROFILE * * * *  **EL A (IH85) * *LIGHT PROFILE * * * *  **TUSING A 0.0175-7 *SB526B62C12M*TO OBTAIN CONVECT*HEAT-TRANS* 0.0175 / *ROCKWELL/ *J.W.CUMMINGS/RI *DMS-I*  **ATO **THE NASA/ROCKELL *16W116E52V8R18F10**TVE HEAT-TRANSFER* * *3.01 - *AEDC - *K.W.NUTT/AEDC-VKF*VOLUI*  **41A-W5 /*INTERNATIONAL SP **OT-T38B62C12M16W1*-RATE DISTRIBUTIO* *4.02 *SUPERSONIC WIN*/SH *APRII*  **ACE SHUTTLE INTEG*16E52V8R18F10 *NS ON THE SPACE S* * *D TUNNEL (A) *J. E. VAUGHN *  **TUSING A 0.0175-* *VEHICLE DURING S * * **  **TUSING A 0.0175-* *VEHICLE DURING S * * **  **TUSING A 0.0175-* *VEHICLE DURING S * * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TUSING A 0.0175-* *VEHICLE DURING S * **  **TU	OMMENTS DR-2431 ME 07 1980
DC - *TEST RESULTS FROM*OTS-T38S26B62C12M*TO OBTAIN CONVECT*HEAT-TRANS* O.0175 / *ROCKWELL/ *J.W.CUMMINGS/RI *DMS-I** **THE NASA/ROCKELL *16W116E52V8R18F10*IVE HEAT-TRANSFER* *3.01 - *AEDC - *K.W.NUTT/AEDC-VKF*VOLUI** **INTERNATIONAL SP *OT-T38B62C12M16W1*-RATE DISTRIBUTIO* *4.02 *SUPERSONIC WIN*/SH *MAY,** **BS *ACE SHUTTLE INTEG*16E52V8R18F10 *NS ON THE SPACE S* * *D TUNNEL (A) *J. E. VAUGHN * **T USING A 0.0175-* *VEHICLE DURING S * * * * *DMS * **SCALE MODEL (60-0* *IMULATED FIRST AN* * * * * * * * * * * * * * * * * * *	DR-2431 ME 07 1980
### A * THE NASA/ROCKELL * 16W116E52V8R18F10*IVE HEAT-TRANSFER*	ME 07 1980 DR-2431
- *THE NASA/ROCKELL *16W116E52V8R18F10*IVE HEAT-TRANSFER*	ME 07 1980 DR-2431
## ## ## ## ## ## ## ## ## ## ## ## ##	1980 DR-2431
**************************************	DR-2431
**T USING A 0.0175-*	
*T USING A 0.0175-*	
*SCALE MODEL (60-0*	
*TS) CONDUCTED IN *	
*THE AEDC-VKF TUNN*	
*EL A (IH85) * *LIGHT PROFILE * * * * * * * * * * * * * * * * * * *	
* * * * * * * * * * * * * * * * * * *	
EDC - *TEST RESULTS FROM*OTS-T38S26B62C12M*TO OBTAIN CONVECT*HEAT-TRANS* O.O175 / *ROCKWELL/ *J.W.CUMMINGS/RI *DMS-I WTA - *THE NASA/ROCKELL *16W116E52V8R18F10*IVE HEAT-TRANSFER* *3.01 - *AEDC - *K.W.NUTT/AEDC-VKF*VOLUI 41A-W5 /*INTERNATIONAL SP *OT-T38B62C12M16W1*-RATE DISTRIBUTIO* *4.02 *SUPERSONIC WIN*/SH *APRIL 485 *ACE SHUTTLE INTEG*16E52V8R18F1O *NS ON THE SPACE S* * D TUNNEL (A) *J. E. VAUGHN * R-151,800*RATED VEHICLE TES* *HUTTLE INTEGRATED* * * G. W. KLUG * *T USING A 0.0175-* *VEHICLE DURING S * * * *-DMS * *SCALE MODEL (60-0* *IMULATED FIRST AN* * * * *	
## ## ## ## ## ## ## ## ## ## ## ## ##	
## ***********************************	ME 08
## ## ## ## ## ## ## ## ## ## ## ## ##	
R-151,800*RATED VEHICLE TES*	L, 1980
*T USING A 0.0175-*	
*SCALE MODEL (60-0* *IMULATED FIRST AN* * * * *	
*TS) CONDUCTED IN *	
*THE AEDC-VKF TUNN*	
*EL A (IH85)	
* * * * * * *	
NRC - *INVESTIGATION OF *OV102 (105-0)     *TO OBTAIN LATERAL*FORCE     *      0.02/ *LARC  /        *W.PELHAM PHILLIPS*DMS-I	DR-2432
	. 1981
43 /*LATERAL-DIRECTION* *DYNAMIC CHARACTER* * *UNITARY PLAN W*J. W. BALL *	•
125 *AL AERODYNAMIC CH* *ISTICS OF THE ORB* * *IND TUNNEL *G. W. KLUG *	
R-160.845*ARACTERISTICS FOR* *ITER OVER THE MAC* * * *-DMS *	
*A 2 PERCENT (MOD *	
*EL 105-0) SPACE S*	
*HUTTLE ORBITER (V*	
*EHICLE 102) IN TH*	
*E LARC UPWT AT MA*	
*CH NUMBERS FROM 2*	
*.5 TO 4.5 (LA125)*	
10 10 10 (unitable)	

<b></b>					WIND	TUNNEL TEST		DMS DATA	PROCE	SSING				324
	*		*	•	*		*		*MODE		k	*	COGNIZANT	* BASIC
TEST ID	* *	REPORT T	ITLE *	CONFIGURATION:	S * *	TEST PURPOSE	*	TYPE OF TEST		SCALE:		*	TEST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
VSWC	- +D	ECULTE DE	TECTO .	O.O2 SCALE ORBI	TE+00T/	IN CODE A	JO 45	EDDCE	*13.1		*ROCKWELL/	<b>4.1</b>	J. DAILEDA/RO	C+DMC-DD-2422
1310				R VEHICLE 102 (				-UKCE	*13.1		*NSWC -		ELL INTERNATIO	
DA 17 1				DEL 105-0), MOD					*	,	*	*AL		*
CR-151,7				FIED MODEL 89-0					*	,	*		C. WOODS, G.	
		LE VEHICL			-	IMBER AT A			*	,	<b>*</b>		ASHBY, JR./LAR	C*
		R IN THE				UMBER OF 14			*	,	*		W.HERSEY G. MCDONALD	*
		RFACE WEA! Ter hyper'				TO EXPAND TH RENT DATA BA			*	,	<b>*</b> <b>±</b>	. * - DI		*
		TUNNEL 9				E MACH 10			*	,	*	*		*
	*)	TOMMEL 3	(0/1//	•		W THE FLIG			*	,	*	*		*
	*		*	<b>k</b>		DITIONS WHE			*		*	*		*
	*		*	<b>k</b>	*ONS	T OF VISCO	JS *		*	,	*	*		*
	*		*	<b>k</b>	*INT	RACIONS DC	CUR*		*	1	*	*		*
	*		1	k	*S.		*		*		*	*		*
	*		•	<b>*</b>	*		*		*		*	*_		*
				ORBITER (47.0)				FORCE		-	*ROCKWELL/		S.SPANGLER/RI	
				*102 WITH RIGID					*0.8		*AEDC -		R.HOULIHAN/RI	*DEC., 1979
507 Da129		THE SPAC		D FLEXIBLE TAIL		AL TAIL ON			*1.55 *		*TRANSONIC PRO *ULSION WIND T			*
		E ORBITER				ERAL-DIRECT			*		*NNEL (PWT-16)			*
UK 151.7		L TAIL US				STABILITY,			*		*	*		*
		03-SCALE				CONTROL C			*		*	*		*
	*4	7-0) IN T	HE AEDĊ	*	*ACTI	ERISTICS AN	• V •		*		*	*		*
		16T PROPU				CAL TAIL L	*DAD		*		*	*		*
		ND TUNNEL	(OA 129	*	*S.		*		*		*	*		*
	*)		,	*	*		*		*		*	*		*
	*		•	•	*		*		*		*	*		*

ID * REPORT TITLE * TESTED * PURPOSE * TEST *MACH RANGE* AGENCY * PERSONNEL *OR COMMENTARY CONTROL ** PERSONNEL ** PERSONNEL ** POR COMMENTARY CONTROL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONNEL ** PERSONN				WIND TUNNEL TEST	/ DMS DATA	PROCESSING			325
TEST		*	•	•		*MODE!	·	+ COCNTANT	* PASTC
SWT - *HEAT TRANSFER TE *E CONFIGURATION 5*RANSFER + PRESSUR*  1		* * REPORT TITLE				* SCALE	* TESTING	* TEST DMS	*PUBLICATIONS *OR COMMENTS
WIT - +HEAT TRANSFER TE *E CONFIGURATION 5*RANSFER + PRESSUR*	2C	- *BASE PRESSURE AN	D*INTEGRATED VEHIC	.*TO MEASURE HEAT	T*PRESSURE	*0.0225 /	*ROCKWELL/	*J.W.FOUST/RI	*DMS-DR-2435
-151,415+TLE PLUME SIMULAT*	SWT	- *HEAT TRANSFER TE	*E CONFIGURATION	*RANSFER + PRESSU	R*	*2.0 -	*LERC -	*D.W.HERSEY	
*ION MODEL (19-0TS*						*		*-DMS	*
*) IN THE NASA-LEW* *IS RESEARCH CENTE* *IS RESEARCH CENTE* *RIOXIO-FOOT SUPE* *E ALONG SIDE WALL* *RSONIC WIND TUNNE* *L (TEST IH39) * ** ** ** ** ** ** ** ** ** ** ** ** *	151,4			-		*	*D TUNNEL	*	*
*İS RESEARCH CENTE*						*	*	≖ *	*
*RSONIC WIND TUNNE*		*IS RESEARCH CENT	E*	*CULATION; THE SA	M*	*	*	*	*
*L (TEST IH39) * *LUME-INDUCED SEPA* * * * * * * * * * * * * * * * * * *					_	*	*	*	*
* * * * * * * * * * * * * * * * * * *			<b>t</b> *			*	*	*	*
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# # # # # # # # # # # # # # # # # # #		*	*			*	*	*	*
X *ITER TRIMMED CENT*		*	*	*Y TEMPERATURES.	*	*	*	*	*
X *ITER TRIMMED CENT*	26	*SPACE SHUTTLE OR	 B*	*	*	*	*LARC /	+ *J. W. BALL	*DMS-DR-2436
*ENSION STUDY VOL *				*	*	*	•		*VOLUME 06
*UME VISYSTEM DE*	<b>361</b>			* .	*	*	*	*	*AUGUST, 1978
*SIGN STUDIES *				*	*	*	*	* *	*
VT - *NIC TESTS IN THE *MODEL 74-OTS WITH*AMIC INCREMENTS D*			*	*	*	*	*	*	*
WT - *NIC TESTS IN THE *MODEL 74-OTS WITH*AMIC INCREMENTS D*	_	*	*	*	*	*	*	*	*
/*NASA/MSFC 14-INCH*ORB. MOLD LINE C *UE TO ATTACH STRU*							•	- •	
**************************************									*FEB., 1979
*SCALE MODEL (74- *MODEL 74-OTS WITH*; WIRE BUNDLE FAI* * * * * * * * * * * * * * * * * * *						*			*
*OTS) SPACE SHUTTL*ORB. MOLD LINE C *RINGS; FLOW ANGUL* * * * * * * * * * * * * * * * * * *	51.7					*	*	*-DMS	*
*E LAUNCH VEHICLE *HANGES ON WING *ARITY * * * * * *						*	*	*	*
i i					*	*	*	*	*
* * * * * * *			*	*	*	*	*	*	*
		*	*	*	*	*	*	*	*
			•						
$\cdot$						•			

						MIND	TUNNEL TE	ST /	DMS DATA	PROCE	SSING					326
TEST ID	* *	REPORT T	ITLE		JRATIONS STED	* *	TEST PURPOSE		TYPE OF		SCALE:	-	*		COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
RC	- *R	ESULTS OF	AN EXP	*PROPOSED	VEHICLE	*TO 0	BTAIN PRE	SSUR	FORCE	*0.01	/	*ROCKWELL/	*	ا. ل	MARROQUIN/RI	*DMS-DR-2438
7SWT		RIMENTAL				*E CC	DEFFICIENT	INC*	PRESSURE			*ARC -			.HERSEY	*VOLUME O1
246-1		SATION TO					ENTS DUE T			*2.5					H. LINDAHL	*FEB., 1982
A138		E ORBITER					EFFECTS C			*		*OT SUPERS			S	*
:R-160,8		ID ROCKET					ORBITER,			*		*WIND TUNN	EL (U*	•		*
		JET PLUM					TANK, AN			*		*NITARY)	*			*
		D EFFECTS					ND TO OBT			*		* *	*			<b>∓</b>
		NG A .O1-				_	3 LOADS AN /ON HINGE	-		÷		*				<b>.</b>
		ITEGRATED Space shut				*NTS	JON HINGE	MUMC	•	Ţ.		<b>+</b>				*
		EL (75-01				*******				*		*	*	k		*
		IE NASA/AR				*			•	*		*	*	k		*
		OT LEG OF				*			•	*		*	*	k		*
		TARY PLAN				*			k	*		*	*	k		*
		INNEL		*		*			k	*		*	*	·		*
	*			*		*		,	k	*		*	**	k		*
ARC	- *F	RESULTS OF	AN EXP	*PROPOSED	VEHICLE	*TO (	BTAIN PRE	SSUR	FORCE	*0.01	/	*ROCKWELL/	*	٠J.	MARROQUIN/RI	*DMS-DR-2438
97SWT	- *E	RIMENTAL	INVESTI	<b>*</b> 5		*E C0	DEFFICIENT	INC	PRESSURE	*1.55	-	*ARC -	*	D.W	.HERSEY	*VOLUME 02
246-1	/*0	OT NOITAE	DETERMI	*		*REMI	ENTS DUE 1	O PL	k	*2.5		*9-FOOT BY	7-F0*	kR.	H. LINDAHL	*FEB., 1982
A138	*1	NE ORBITER	AND SO	*		*UME	EFFECTS C	N ,	<b>*</b> .	*		*OT SUPERS	ONIC *	-DM	S	*
CR-160,8	356*L	ID ROCKET	BOOSTE	*		*THE	ORBITER,	EXTE:	k .	*		*WIND TUNN	EL (U+	<b>k</b>		*
		R JET PLUM					L TANK, AN			*		*NITARY)	*	k		*
		D EFFECTS				•	AND TO OBT		<b>k</b>	*		*	*	ķ		*
		NG A .01-			•		G LOADS AN			*		*	*	<b>k</b>		*
		NTEGRATED					VON HINGE	MOME:	<b>.</b>	*		*	*	<b>.</b>		# 
		SPACE SHUT				*NTS			<b>F</b>	*		* 	*	<b>.</b>		Ŧ 
		DEL (75-01 HE NASA/AF				-			<del>-</del>	* •		<del>-</del>	7			*
		16 NASA/AF DOT LEG OF				*			<del>-</del>	<b>∓</b>		*		r k		*
		TARY PLAN				*			<del>r</del> k	*		*		r k		*
		INNEL	4 47 IAD 1	*		*			k	*		*		k		*
	*			*		*				*		*		*		*

)		)
	WIND TUNNEL TEST / DMS DATA PROCESSING	327
* * CONFIGURATIONS ID * REPORT TITLE * TESTED	* TEST * TYPE OF * SCALE* TESTING * TEST DMS *F	BASIC PUBLICATIONS OR COMMENTS
246-1	*E COEFFICIENT INC*PRESSURE *1.55 - *ARC - *D.W.HERSEY *\ *REMENTS DUE TO PL* *2.5 *9-FOOT BY 7-FO*R. H. LINDAHL *F *UME EFFECTS ON * * *OT SUPERSONIC *-DMS * *THE ORBITER, EXTE* * *WIND TUNNEL (U* * *RNAL TANK, AND SR* * *NITARY) * *B, AND TO OBTAIN * * *WING LOADS AND * * *ELEVON HINGE MOME* * * *NTS * * * * ** ** ** ** ** ** ** ** ** ** *	
CR-167,673*TLE INTEGRATED VE*  *HICLE IN THE AEDC*  *16-FOOT TRANSONI *  *C PROPULSION WIND*  *TUNNEL (IA182) *  *	*INDICATOR DATA, E*	

						WIND	TUNNEL TEST	/	DMS DATA	PROCES	SING					328
	*			*		*		*		*MODEL			*	COGNIZANT	* BASIC	;; ;
TEST	*			*	CONFIGURATIONS	*	TEST	*	TYPE OF			TESTING		TEST DMS	*PUBLICAT	
ID		REPORT	TITLE			*	PURPOSE					AGENCY	*		*OR COMME	ENTS
ERC					PACE SHUTTLE PL							ROCKWELL/		W.FOUST/RI	*DMS-DR-2	
OSWT	- *H	EAT TRA	NSFER TI	E *M	E SIMULATION (M	O*RAN	SFER + PRESS	SUR *1	HEAT-TRANS	*2.2		LERC -		QUAN/RI	*FEB.,	197
44	/*S	TS OF T	HE 0.02:	25*D	EL 19-0TS)	∗E D	ISTRIBUTIONS	5 A*		*3.5	,	*10 BY 10-F00T	∗D.	W.HERSEY	*	
H83	*-	SCALE S	PACE SHI	UT*		*B0U	T THE ORBITE	ER,*		*	3	SUPERSONIC WI	N∗G.	R. LUTZ	*	
R-151,	765*T	LE PLUM	E SIMULA	AT*		*EXT	ERNAL TANK	(ET*		*		D TUNNEL	*-D	MS	*	
	* I	ON MODE	L (19-0	TS*		*).	+ SOLID ROCK	⟨ET∗		*	1	<b>k</b>	*		*	
	* )	IN YAW	ED FLIG	HT*		*B00	STER (SRB)	<b>\F</b> *		*	2	<b>*</b>	*		*	
	*Ć	ONDITIO	NS IN T	H *		*TER	BODY SURFACE	<b>ES</b> *		*		*	*		*	
			EWIS 10			*DUE	TO ROCKET	LU*	i	*	,	*	*	•	*	
	*0	-FOOT S	UPERSON	IC*			RECIRCULATION			*	,	*	*		*	
		IND TUN		*			MPINGEMENT.			*	,	*	*		*	
	*			*			DERIVE GAS I			*	,	*	*		*	
	*			*			RY TEMP. IN			*	,	*	*		*	
	*			*			ASE REGION I			*	,	*	*		*	
	*			*			GAS TEMP. PI	_		*	1	*	*		*	
	*			*			EASUREMENTS			*		*	*		*	
	*			*		*	LACONE MENT	*		*	:	*	*		*	
sc	- *P	RESSURE	AND HE	ΔT * 6	5-0 SS ORBITER	R*TO	MEASURE BASI	F P*	PRESSURE	*0.040	) /	*ROCKWELL/	*d.	W. FOUST, P.L.	*DMS-DR-2	2443
					SE HEATING MODE							*JSC -		MOINE/RI. A.L.		197
H79	•		040-SCA		OL MEATING MODE		FER RATES OF			*		*		RANSCOMB/JSC	*	
			UTTLE O				LED MODEL OF			*		*		W.HERSEY	*	
,			SE HEAT				SPACE SHUT			*		*		R. LUTZ	*	
			(65-0)				ITER BASE R			*		*	*-E		*	
			THERMAL				WITH FIRING			*		*	*		*	
			HAMBER			-	ET ENGINES.			*		*	*		*	
	*	A 0 0 0 1 1 0					DUPLICATING			*		*	*		*	
	*			*			LUME FLOW F			*		*	*		*	
							O SIMULATE			*		··	*		*	
				Ξ			CULATION + I					•	*		*	
	•						MENT IN A N			-		+ •			•	
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	Ţ.			-			CUUM ENVIRO	MIME +		<u>.</u>		<b>*</b>	Ι			
						*NT.		<b>∓</b>		<del>*</del>		<del>*</del>	Ţ.		•	
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		WIND TUNNEL TH	EST / DMS	DATA	PROCES	SING					329
*	*	*	*		*MODEL		k	*	COGNIZANT	* BASIC	;
TEST +	* CONFIGURATION	S * TEST	* TY	PE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICAT:	IONS
ID * REPORT TITLE	* TESTED	* PURPOSE	* T	EST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMME	NTS
	TS *B75C16E64F16FR2								J. DAILEDA/F		
PWT16T - *USING A 0.02-5					*1.6		AEDC -		ELL INTERNATI		
	S) *N111R20U1V27VT1				*		*TRANSONIC PR			*APRIL,	1981
	HUT+T11VT12VT13VT14				*		ULSION WIND			*	
CR-160,488*TLE INTEGRATED					*		NNEL (PWT-16			*	
*HICLE IN THE A		*CH SOLID ROCK			*	:	k .	* - D1	MS	*	
*16-FOOT TRANSO		*OOSTER), WING			*		•	*		*	
*C PROPULSION W		*VERTICAL TAIL			*		•	*		*	
*TUNNEL (IA183)	*	*LOAD INDICATO			*	:	k	*		*	
*	*	*ELEVON HINGE			*	;	k	*		*	
*	*	*NTS, AND BASE			*	:	k	*		*	
	*	*YFLAP PRESSUR			*		*	*		*	
*	*	*TA FOR VERIF			*	•	•	*		*	
*	*	*ON OF TEST IA	A 156A*		*	1	k .	*		*	
*	*	*DATA	*		*	,	k	*		*	
*	*	*	*		*	1	*	* .		*	
	TS *B75C16E64F16FR2				*0.2		ROCKWELL/	-	J. DAILEDA/R		
PWT16T - *USING A 0.02-S					*1.6		AEDC -		ELL INTERNATI		
	S) *N111R20U1V27VT1				*		TRANSONIC PR			*APRIL,	1981
	HUT*T11VT12VT13VT14				*		ULSION WIND			*	
CR-160,489*TLE INTEGRATED		•			*	,	NNEL (PWT-16			*	
*HICLE IN THE A		*CH SOLID ROCK			*		•	*-DI	M2	*	
*16-FOOT TRANSOI		*OOSTER), WING			*	•	į	*		*	
*C PROPULSION W		*VERTICAL TAIL			*	,	•	*		*	
*TUNNEL (IA183)	<b>T</b>	*LOAD INDICATO	- •		<b>∓</b>	1	•	*		#	
<b>∓</b> •	<del>*</del>	*ELEVON HINGE			*	,	•	*		*	
*	<del>-</del>	*NTS, AND BASE			*	,		*		*	
<b>₹</b>	· · · · · · · · · · · · · · · · · · ·	*YFLAP PRESSUR			*	•	•	*		*	
<b>∓</b>	<b>平</b> 	*TA FOR VERIFI	<del>.</del>		*	,	•	*	•	*	
<b>∓</b>	<b>平</b> 	*ON OF TEST IA	4 156A*		*		•	*		*	
*	<b>平</b> 	*DATA	*		*	,	•	*		*	
₹	*	*	*		*	•	·	*		*	

			WIND	TUNNEL TEST	/ DMS DATA	PROCESS	ING		330
	*	*	*		*	*MODEL	*	* COGNI	ZANT * BASIC
TEST	*	* CONF	IGURATIONS *	TEST	* TYPE OF		CALE* TESTIN		
ID	* REPOR		TESTED *	PURPOSE	* TEST	-	ANGE* AGENCY		· - · · · · · · · · · · -
ARC	- *RESULTS	OF A WIND*SSV 14	IDA/B/C/R OR*TO	OBTAIN OV-10	2 *FORCE	*3.5 ~	*ROCKWELL		SCHEL/RI*DMS-DR-2445
87SWT	- *TUNNEL I	PRESSURE *BITER	*DIS	TRIBUTED PRE	SS*PRESSURE	*3.5	*ARC		NBERG/RI*VOLUME 01
318-1	/*LOADS TI	EST OF THE*	*URE	S, VEHICLE F	OR*	*	*8-F00T E	3Y 7-FO*S. R. HOU!	LIHAN *JUNE, 1983
OA146	*0.03-SC	ALE SPACE *	*CES	AND MOMENTS	, *	*	*OT SUPER	RSONIC *J. E. VAU	SHN *
CR-167,	652*SHUTTLE	ORBITER *	*ELE	VON HINGE MO	ME*	*	*WIND TUN	NNEL (U*-DMS	. *
	*(MODEL 4	47-0) IN T*	*NTS	, AND WING L	DA*	*	*NITARY)	*	*
	*HE 8X7-	FOOT LEG O*	*DS	IN THE HYPER	SO*	*	*	*	*
	*F THE NA	ASA/ARC UN*	*NIC	FLOW REGION	*	*	*	*	*
		LAN WIND T*	*FOR	RETURN TO L	AU*	*	*	*	*
	*UNNEL (	DA146) *	*NCH	SITE (RTLS)	A*	*	*	* .	*
	*	*	*B0R		*	*	*	*	*
	*	*	*		* .	*	*	*	*
ARC	- *RESULTS	OF A WIND+SSV 14	DA/B/C/R OR*TO	OBTAIN DV-10	2 *FORCE	*3.5 -	*ROCKWELI	L/ *A. J. RIT	SCHEL/RI*DMS-DR-2445
87SWT		PRESSURE *BITER		TRIBUTED PRE		*3.5	*ARC		NBERG/RI*VOLUME 02
318-1		EST OF THE*	-	S. VEHICLE F		*		3Y 7-FO*S. R. HOU	
OA 146		ALE SPACE *		AND MOMENTS		*		RSONIC *J. E. VAU	· · · · · · · · · · · · · · · · · ·
	653*SHUTTLE			VON HINGE MO	•	*		NNEL (U*-DMS	*
0 10.,		47-0) IN T*		. AND WING L		*	*NITARY)	*	*
		FOOT LEG 0*		IN THE HYPER		*	*	*	*
		ASA/ARC UN*		FLOW REGION		<u>.</u>		Ţ	<u>*</u>
		LAN WIND T*		RETURN TO L		<i>T</i>		<u> </u>	<u>.</u>
					<del>-</del>	<b>.</b>	<b>.</b>	<b>.</b>	<u>-</u>
	*UNNEL (	UA 146) *		SITE (RTLS)	A*	<b>∓</b>	*	<b>.</b>	- -
			*B0F	()	*	*		<b>▼</b>	<u>.</u>
4.00	*	*	<del>=</del>		*	*	* * * * * * * * * * * * * * * * * * *		T /DI : DNC DD 0440
ARC		HUTTLE THI*	_	ERMINE AEROH		* LARGE	•	•	
	- *N SKIN			IG AROUND PRO		*5.3 -		- *D.W.HERSE	
241	•	TS OF SIMU*		ANCES AND IN		*5.3		T HYPER*J. E. VAU	GHN *DCT., 1980
IH51C		ARGE SCALE*		GATE TPS	*	*		IND TUN*-DMS	*
CR-160,	519*PROTUBE			E HEATING RA		*	*NEL	*	*
		ALE TILE *		ISING A HALF-	SC*	*	*	*	*
		PLATE MOD*	*ALE	TILE ARRAY	*	*	*	*	*
		TS IN THE *	*		*	*	*	*	*
		ES RESEARC*	*		*	*	*	*	*
		R 3.5-FT H*	*		*	*	*	*	*
	*YPERSON	IC WIND TU*	*		*	*	*	*	*
	*NNEL (I	H51C) *	*		*	*	*	*	*
	*	*	*		*	*	*	*	*

			WIND TUNN	IEL TEST /	DMS DA	TA PROCE	SSING					331
*	*		*		*	*MODE!	 !	*	*	COGNIZANT	* BAS	IC
TEST *	*	CONFIGURATIONS	* T	EST	* TYPE		SCALE	* TESTING	*	TEST DMS	*PUBLIC	
ID + RE	PORT TITLE *	TESTED	* PUR	POSE	* TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COM	MENTS
							o- (				+DMC DD	0.440
	E SHUTTLE THI* IN HEAT TRANS*			IE AEROHEA BUND PROTU		* LAR( *5.3		*ROCKWELL/ *ARC -		W. FOUST/RI .HERSEY	*DMS-DR *VOLUME	
	TESTS OF SIMU*			AND INVE		*5.3		*3.5-FOOT HYPER			*OCT	1980
	D LARGE SCALE*		*STIGATE		*	*5.5		*SONIC WIND TU			*	1300
	JBERANCES AND*			TING RATE	*	*		*NEL	*	•	*	
	SCALE TILE *			A HALF-SC		*		*	*		*	
	LAT PLATE MOD*		*ALE TILE		*	*		*	*		*	
*EL 5	B-OTS IN THE *		*		*	* .		*	*		*	
	AMES RESEARC*		*		*	*		*	*		*	
	NTER 3.5-FT H*		*		*	*		*	*		*	
	SONIC WIND TU*		*		*	*		*	*		*	
*NNEL	(IH51C) *		*		*	*		*	*		*	
C - *RESU	*   TC OE CUNTT! +E\	KTENAL OXYGEN HY	T THOOTATAL A	TRANSONT	* EODCE	* 0.4	_	* *ROCKWELL/	* D D	.BURROWS/R.I.	*DMC_DD	-2449
		ROGEN TANK FOREB				* 0.4		*AEDC -		.SPURLIN/AEDC		1981
	EM ASCENT AIR+OL			NT AIR DA		* 1.5	_	*TRANSONIC PROF	_	•	*	1301
	SYSTEM CALL *			M (AADS):		*		*ULSION WIND TU			*	
	ION TEST USIN*			ATE AN AL		*		*NNEL (PWT-16T)			*	
	E 0.07-SCALE *			AADS: PER		*		*	*		*	
*EXTE	RNAL TANK FOR*		*FORM LIM	ITED TUNN	<b> </b> *	*		*	*		*	
*EBOD	Y MODEL (68-T*		*EL FLOW	SURVEY	*	*	•	*	*		*	
*) IN	THE AEDC PWT*		*		*	*		*	*		*	
	DOT TRANSONI *		*		*	*		*	*		*	
	ND TUNNEL (IA+		*		*	*		*	*		*	
*132)	*		*		*	*		*	*		*	
*	*		*		*	*		*	*		*	
	RIMENTAL RESU*			Y FLUTTER				*ROCKWELL/		.KINGSLAND, M.		-2450 1979
	OF TESTS TO D* MINE THE EFFE*			ONS MADE		*1.1		*ARC - *2-FOOT BY 2-FO		DTCH/ROCKWELL	*MAY,	19/9
	OF ORBITER TH*			COUT THERM		-		*OT TRANSONIC V			*	
	PROTECTION *			CTION MAT		*		*IND TUNNEL	*-DM		*	
	STEM (TPS) T*		*ERIAL	OTTOW MAT	*	*		*	*	•	*	
	ON PANEL FLU*		*		*	*		*	*		*	
	CONDUCTED IN+		*		*	*		*	*		*	
*THE	ARC 2X2 TWT. *		*		*	*		*	*		*	
*	*		*		*	*		* '	*		*	

				WIND	TUNNEL TEST	/ (	DMS DATA	PROCE	SSING							332
	*	*		*		*		*MODE	L	*		*	COGNIZANT	*	BAS	C
TEST		*	CONFIGURATIONS	*	TEST		TYPE OF						TEST DMS			ATIONS
ID	* REPORT TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	*	AGENCY	*	PERSONNEL	*01	R COM	MENTS
AEDC	- *RESULTS OF BOUN	IDA*		*		*H	EAT-TRAN	S*		*R			W.HERSEY		MS-DR	-2451
HWTB	- *RY LAYER TRANSI	TI*		*		*		*		* A	EDC -	∗G.	R. LUTZ	* M.	AY,	1979
P4A	/*ON TESTS OF THE	0*		*		*		*			YPERSONIC WIN		MS	*		
	A29*.025-SCALE RIGH			*		*		*		*D	TUNNEL (B)	*		*		
CR-151,	772*HAND WING AND T			*		*		*		*		*		*		
	*NCATED AFT FUSE			*		*		* .		*		*		*		
	*GE MODEL (94-0)			*		*		*		*		*		*		
	*N THE AEDC HWTE	. *		*		*		*		*		*		*		
	*	*		*		. *		*	. ,	*_		*	OLIAN /DOGINATIO	*		0.450
ARC	- *RESULTS OF HEAT	-	- · · · · · · · · · · · · · · · · · · ·	–	ETERMINE THE		EAI-IRAN		•				QUAN/ROCKWELL L. BERTHOLD/RO			
	- *RANSFER TESTS (				TRANSFER RA			* 5. * 7.			RC - 1.5-FOOT HYPER				CP1.,	1962
230 IH99	/*THE SPACE SHUTT *FORWARD SRB SEC				N THE SPACE LE SRB NOSE	_		* /.			ONIC WIND TUN			*		
	383*ION AT ASCENT				IN THE VICIN			- -		_			R. LUTZ	*		
CK 107,	*DITIONS USING T	-			F THE FORWAR			*		*			MS COTE	*		
	*O.10-SCALE MODE				RATION MOTOR			*		*		*		*		
	*98-S IN THE NAS				D AROUND SIN			*		*		*	-	*		
	*/AMES 3.5-FOOT				D RIVET HEAD			*		*		*		*		
	*T (IH99)	*		*	D KITCI HEAD	*		*		*		*		*		
	*	*		*		*		*		*		*		*		
CALSPAN	- *BASE PRESSURE A	ND*	19-0TS-B64,C16,E6	S*TO M	EASURE HEAT	[N*H	EAT-TRAN	S*O.02	225 /	*R	OCKWELL/	*C.	E. WITTLIFF/CA	L*D	MS-DR	-2453
LT	- *HEAT TRANSFER 1										ALSPAN -	*SF	PAN	* J	UNE,	1979
195-100	/*STS OF THE 0.02	25*	, V23, W129, S22, N10	*URES	AND TO DETE	R*		*4.5		*L	UDWIEG TUBE	*D.	.W.HERSEY	*		
IH75	*-SCALE SPACE SH	*TUF	6,T33	*MINE	GAS RECOVER	₹Y\$		*		*			. R. LUTZ	*		
CR-151,	776+TLE PLUME SIMUL	.AT*		*TEMP	ERATURES IN	*		*		*		* - [	DMS	*		
	*ION MODEL (19-0	TS*		*THE	BASE REGIONS	S *		*		*		*		*		
	*) IN THE NASA/				SCALED MODE			*		*		*		*		
	*SPAN LUDWIEG TO	JBE*			THE SPACE SHU			*		*		*		*		
	*WIND TUNNEL	*			VEHICLE WIT			*		*		*		*		
	*	*			TER + SRB F			*		*		*		*		
	*	*			ROCKET ENGI			*		*		*		*		
	<b>∓</b>	*			SIMULATING PL			*		*		*		*		
	Ŧ *	*			RECIRCULATION			*		# _		*		*		
	*	*			MPINGEMENT IN			*		Ŧ	•	- -		-		
	*	*		*AN A	LTITUDE ENVI	rk*		*		Ţ		÷		- +		
	•	*		*UNWE	ini.	- -		*		÷		÷		*		
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- *TS FOR CENTER-OF-SELINE - *TS FOR CENTER-OF-SELINE - *TS FOR CENTER-OF-SELINE - *TS FOR CENTER-OF-SELINE - *TS FOR CENTER-OF-SELINE - *TS FOR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CENTER-OF-SELINE - *TS OR CEN	TEST	TFC1					MIND TONNE	L TEST /	DMS DAT	A PROCESS	SING					333
### - *TS FOR CENTER-OF-*SELINE	FHT - *TS FOR CENTER-OF-\$SELINE		*	REPORT TITL	* * E *					F * S			* * *	TEST DMS	*PUBLICA	TIONS
**************************************	### - *TS FOR CENTER-OF-*SELINE   A															0454
## / **GRAYTY EXTENSION**140A/B ORBITER WI*CATIONS, DEVELOPE* ***CONTINUOUS-FLO**J. W. BALL *APRIL, 1979 ### A77	### ### ##############################					•						•		C. DUNAVANT/LA		
### AST #** ON ORBITER THERM *** TH S-2 FILLET *** D*** TO INCREASE THE *** W HYPERSONIC T*G. R. LUTZ *** AL PROTECTION SYS** 140A/8 ORBITER WI** ALLOWABLE C.G. R. *** UNNEL *** OMS *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE ORBITE**. *** ON THE SILTS SHOWED NO** ORBITER WITH** ORBITER** ON THE SILTS SHOWED NO** ORBITER** ON ORBITER WITH** ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ON ORBITER** ORBITER** ON ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER** ORBITER**	## A57 ON ORBITER THERM *TH S-2 FILLET *D TO INCREASE THE * * * * * * * * * * * * * * * * * * *		-							* 10.3				W RAII		
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## ** ** ** ** ** ** ** ** ** ** ** ** *	## SPACE SHUTTLE ORB*  #* ON OF THE ORBITER*  #* ON THE ORBITER*  #* ON THE ORBITER*  #* ON THE ADDC VF **  #* ON THE AEDC VF **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING EDGE **  #* ADING									*8.0 -					*JUNE,	1979
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975WT - *USING A 0.03-SCAL*E INTEGRATED VEHI*ELEMENTS + COMPO = PRESSURE	SSING 334	PROCESSING	DMS DATA	WIND TUNNEL TEST				
TESTED   PURPOSE   TEST   MACH RANGE   AGENCY   PERSONNEL	L * * COGNIZANT * BASIC	*MODEL	*	*		*		
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975WT - *USING A O.O3-SCAL*E INTEGRATED VEHI*ELEMENTS + COMPO *PRESSURE *1.55 - *ARC *J. DALLEDA/RI *J. 55 - *P. *MODEL (47-O1S) *CLE 47-OTS) **ELEVON, WING LOA * *2.50 *OT SUPERSONIC *J. L. GLYNN *CR-160.487*TLE INTEGRATED VE* *DATA, SELEVON HING* *NITORY *NITORY U.V-DMS *NITORY *NITORY U.V-DMS *NITORY *NITORY U.V-DMS *NITORY *NITORY U.V-DMS *NITORY *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-DMS *NITORY U.V-D	RANGE* AGENCY * PERSONNEL *OR COMMENTS	*MACH RANG	* TEST	* PURPOSE	TESTED	TITLE *	REPORT	ID
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CR-160, 487-TLE INTÉGRATED VE*  *HICLE IN THE NASA*  *DATA, GRE, F+M *  *HICLE IN THE NASA*  *DATA, GRE, F+M *  *HICLE IN THE NASA*  *DATA, GRE, F+M *  *HICLE IN THE NASA*  *DATA, GRE, F+M *  *HICLE IN THE NASA*  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  *DATA, GRE, F+M *  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY)  **NITATY	·	*2.50						
*HICLE IN THE NASA* *DATA, ÉLEVON HINO* * *NITARY) *  *AMES RESEARCH CE* *E MOMENTS, FOUR C* * **  *NTER 9X7 FOOT SUP* *OMPONENT VT FORCE* **  *ERSONIC WIND TUNN* *DATA SECONDARY* **  *EL (IA184) * *OF DATA ON SIMUL **  *ATED AADS PROBE M**  *OUNTED IN NOSE OF* **  *UNITED IN NOSE OF* **  **  **  **  **  **  **  **  **  *		-						
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**NTER 9X7 FOOT SUP* *OMPONENT VT FORCE* *	TNLIARI) T	Ţ		•		_		
*ERSONIC WIND TUNN*		_						
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LARC - **RESULTS OF SHUTTL**EXTERNAL OXYGEN H**OBTAIN A HIGH SUD**FORCE						177	CC (IAIO	
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LARC - *RESULTS OF STRITL *EXTERNAL OXYGEN H*OBTAIN A HIGH SUP*FORCE			<b>*</b>			-	•	
LARC - *RESULTS OF SHUTTL*EXTERNAL OXYGEN H*0BTAIN A HIGH SUP*FORCE		τ 	<b>-</b>					
UPWT	- +DOCKWELL / +D D BUDDOWS /D T +DMS-DD-2/67	* 2 5 -	+ E000CE	•	EVTERNAL OVVCEN L	OE CUITTI +	DECINTE	LADC
1267								
IA180 *DATA SYSTEM HIGH * *DS) CALIBRATION; * * * *IND TUNNEL *W. B. MEINDERS CR-160,813*SUPERSONIC CALIB * *OBTAIN SHOCK DETA* * * *CDMS **COMS **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **COME **CO		* 4.03						
CR-16O,813*SUPERSONIC CALIB * *OBTAIN SHOCK DETA* * * *-DMS *RATION TEST USING* *CHMENT DIAGNOSTIC* * * * *THE O.07-SCALE E * *INFORMATION * * * *TRERNAL OXYGEN HY* * * * * * *DROGEN TANK FOREB* * * * * * * *ODY MODEL (68-T) * * * * * * * *IN THE UNITARY PL* * * * * * * *AN HIGH SPEED LEG* * * * * * * *OF THE LARC 4X4 * * * * * * * *WIND TUNNEL (IA18* * * * * * * * * *O) * * * * * * * * *ARC - *SPACE SHUTTLE HRS*HRSI TILE PANEL *TO DETERMINE DYNA*PRESSURE * 0.61- *ROCKWELL/ *C. L. STEVENS, R. *ITWT - *I TILE TESTS OS36*CALIBRATION PANEL*MIC RESPONSE AND * * * * * * * * * * * * * * * * * * *		*		· · · · · · · · · · · · · · · · · ·		-		
*RATION TEST USING* *CHMENT DIAGNOSTIC* * * * * * * * * * * * * * * * * * *		*					-	
*THE O.07-SCALE E *	# +-DM2 #	*						CK-100,8
*XTERNAL OXYGEN HY*		*	, <del>*</del>					
*DROGEN TANK FOREB*		*	*	*INFURMATION				
**ODY MODEL (68-T) *		*	*	<b>.</b>				
*IN THE UNITARY PL*		*		*				
*AN HIGH SPEED LEG*		*	*	*				
* OF THE LARC 4X4 *	* * *	*	*			–		
*WIND TUNNEL (IA18*		*						
**************************************		*		<del>*</del>				
* * * * * * * * * * * * * * * * * * *		*	*	*		WEL (TAIR*		
11TWT - *I TILE TESTS OS36*CALIBRATION PANEL*MIC RESPONSE AND *		*		<del>*</del>		*	(0)	
11TWT - *I TILE TESTS OS36*CALIBRATION PANEL*MIC RESPONSE AND *	* * ** *** *** ** *** *** *** *** ***	+ 0.64-	+005551105	+TO DETERMINE DV	IDET THE DANE!		CDACE CU	ADC
369-1		-						
975WT - *NASA/AMES RESEARC*	• • • • • • • • • • • • • • • • • • • •	+ 2.50						
OS36/37 *H CENTER 11X11-FO*		*						-
CR-167,668*OT AND 9X7-FOOT W* *O COMBINED AERODY* * *9-FOOT BY 7-FO* *IND TUNNELS USING* *NAMIC AND STRUCTU* * *OT SUPERSONIC * *TEST FIXTURES 96 * *RAL VIBRATION LOA* * *WIND TUNNEL (U*		*						
*IND TUNNELS USING* *NAMIC AND STRUCTU* * *OT SUPERSONIC *  *TEST FIXTURES 96 * *RAL VIBRATION LOA* * *WIND TUNNEL (U*		*				-		,
*TEST FIXTURES 96 * *RAL VIBRATION LOA* * *WIND TUNNEL (U*		*						OK-107,0
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	*WIND TORNEL (U* * *NITARY) * *	- -	\ <del>''</del>	*DINGS				
*/37) * * * * * * * * *	THE MET!	-	-	*DI1402		* O (U336*		
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					WIND TUNNEL T	EST /	DMS DATA	PROCESSI	NG				335
	*		*		*	*		*MODEL	*	*	COGNIZANT	* BASI	C
TEST ID		EPORT TIT	* 'LE *	CONFIGURATIONS TESTED	* TEST * PURPOSE	*	TYPE OF TEST		CALE* TESTI		TEST DMS PERSONNEL	*PUBLICA *OR COMM	
ARC	- *RES	ULTS OF T	HE AF*	AFRSI SSV PRESSU	R*AFRSI DETAIL	.ED EN+1	PRESSURE	<b>*0.035</b>	/ *ROCKWEL	L/ *S.0	C.CARRION/ROCK	W*DMS-DR-	2459
11TWT				-LOADS MODEL 84		*		* 0.60-	•	- *ELI		*VOLUME	
587-1	/*RON	MENT TEST	OF T+0	)	*	*		* 3.50	*11-F00T	TRANSO*D.	E. POUCHER	*AUGUST,	1984
0A310A		O.035-SCA			*	*		*		D TUNNE*B.		*	
0A310B		RESSURE-L			*	*		*	*L (UNIT	ARY) *-DA	AS	*	
0A310C		EL 84-0 I			*	*		*	*	*		*	-
CR-167,		S 11X11 F			*	*		*	*	*		*	
		AND THE L			*	*		*	*	*		*	
		FT. AND SWT (OAS			*	*		*	*	*		*	
	*B,C		IIUA, *		<b>.</b>	•			*			•	
	***	,			*	*		*	*	*		*	
LERC	- *RFS	IIITS OF T	HF AF*	AFRSI SSV PRESSU	*AFRST DETAIL	FD FN*I	PRESSURE	*0.035	/ *ROCKWEL	1/ *5.0	C.CARRION/ROCK	W+DMS-DR-	2459
86SWT				-LOADS MODEL 84		*	RESSORE	* 0.60-	*ROCKWEL	* .	•	*VOLUME	
046		MENT TEST		-	*	*		* 3.50			E. POUCHER	*AUGUST.	
LERC		0.035-SCA			*	*		*		FOOT SU*B.		*	
10SWT		RESSURE-L			*	*		*		C WIND *-DN		*	
074	/*MOD	EL 84-0 I	N THE*		*	*		*	*TUNNEL	*		*	
DA310A	*AME	S-11X11 F	T. T *		*	*		*	*LERC	- *		*	
DA310B		AND THE L			*	*		*	*10 BY 1			*	
DA310C		FT. AND		,	*	*		*	*SUPERSO			*	
CR-167,		SAD) TWZ	110A, *		*	*		*	*D TUNNE	L *		*	
	*B,C	)	*		*	*		*	*	*		*	
100	*	OF CUULTI	*	ionei eo o	*	*		*	* * * * * * * * * * * * * * * * * * *	* .	L LENGTHE /DT	*	0.404
ARC		CE SHUTTL OF TURBUL		MODEL 58-0	*TO INVESTIGA		TEAT-IRANS	*0.50 * 7.0	/ *ROCKWEL *ARC		L. LEMOINE/RI F. OKUNO/RI		
244		DARY LAYE			*ERMAL PROTECT *SYSTEM (TPS)			* 7.0			R. HOULIHAN	*MARCH,	1304
1H51D		G EFFECTS			*HEATING RATE			*		IND TUN+G.		*	
		-SCALE TI			*ING A HALF-S			*	*NEL	*-DN		*	
,		ATION USI	_		*TILE ARRAY W			*	*	*	· <del>-</del>	*	
		58-0 IN			*ROVISIONS TO			*	*	*		*	
		/ARC 3.5-			*TILE GAP, ST			*	*	*		*	
	*HYP	ERSONIC W	IND T*		*EIGHT, EDGE			*	*	*		*	
	*UNN	EL (IH510	*		*AND FLOW ORI	ENTA *		*	*	*		*	
	*		*		*TION	*		*	*	*		*	
	*		*		*	*		*	*	*		*	

337			PROCESSING	DMS DATA	TUNNEL TEST /	WIN			****
* BASIC	COGNIZANT	* *	*MODEL		*	*	*	*	
*PUBLICATIONS *OR COMMENTS			* SCALE *MACH RANGE	TYPE OF TEST	TEST * PURPOSE *	CONFIGURATIONS * TESTED *	PORT TITLE	* * REP	TEST ID
	4								
)*DMS-DR-2463 *NOV. 1983	.B. KINGSLAND/RO KWELL	•		RESSURE	OBTAIN PERFORM* E CHARACTERIST*	07-0 LRSI TILE P*TO	E SHUTTLE LRS* S TILE TESTS *		RC 1TWT
*		*11-FOOT TRANSO*S.			OF DAMAGED LR*		,0542 AND 054	_	80-1
*		*NIC WIND TUNNE*H.			TILE AND MINI-*		THE NASA/AME		81-1
*		*L (UNITARY) *-DM			E WHEN SUBJECT*		SEARCH CENTER		541
*		* *	*		TO TRANSONIC S*		1-FOOT WIND		542
*		*	*		K AND TURBULEN*		EL USING MODE		S45
*		* *	*		LOW ENVIRONMEN*		7-0 (0541,054		R-167,
*		* *	*		*	*T	D 0S45)	#2 AND	
*DMS-DR-2464	.W.FOUST AND A.C	*ROCKWELL/ *J.V	* 0.0175/	EAT-TRANS	DETERMINE AERO*	862C12ES2F10M16V3*T0	LTS OF HEAT TO	- *RESUL	EDC
*VOLUME 01					AMIC HEATING O*		FER TEST IN TA		WTB
*AUGUST, 1981		*HYPERSONIC WIN*K.V			HE SPACE SHUTT*	•	RNOLD ENGINEE		41B-67
*		*D TUNNEL (B) *EDO	*		ORBITER WHERE *	*LE	DEVELOPMENT *	*RING	H84B
*	. L. MULKEY		*		A EXTRAPOLATIO*		ER-VON KARMAN		R-160,
*	. W. KLUG	* *G. * *-DN	*		R ANALYTICAL P*		LITY TUNNELS 4		
*	UM3	* *-U	*		ICTIONS WERE N* FEASIBLE OR DI*		D B UTILIZIN * ACE SHUTTLE O*		
*		* *	*		OT EXIST. ALSO*		ER THIN SKIN		
*		* *	*		OBTAIN LIMITE *		MOCOUPLE MODE		
*		* *	*		AW DATA AND OB*		6-0, 60-0, AN		
*		* *	*		N CONTINGENCY *		-O TESTS: OH*		
*		* *	*		RT TRAJECTORY *		OH 105, IH-1		
*		* * .	*		*	*DA1	*	<b>*02</b>	
* '+DMC_DD_4/46/	W FOUCT AND A C	* * * *	* 0.0475/	EAT_TDANG	* DETERMINE AEDOM	*	TO OF HEAT TA	* - *DECIII	EDC
*VOLUME 02	.W.FOUST AND A.C MANSFIELD/RI		•	EAT-IKANS	IAMIC HEATING O*	362C12ES2F10M16V3*T0 3W127 (56-0) *DVA	FER TEST IN T		WTB
		*HYPERSONIC WIN+K.V			HE SPACE SHUTT*		RNOLD ENGINEE		
*	·	*D TUNNEL (B) *EDO			ORBITER WHERE *		DEVELOPMENT 4	-	H84B
*	. L. MULKEY		*		A EXTRAPOLATIO*		ER-VON KARMAN		R-160,
*	. W. KLUG		*		R ANALYTICAL P*		LITY TUNNELS *		
*	DMS	* *-DA	*		ICTIONS WERE N*		D B UTILIZIN		
*		* *	# *		FEASIBLE OR DI*		ACE SHUTTLE OF ER THIN SKIN *		
*		- + + +	*		OT EXIST. ALSO* OBTAIN LIMITE *		MOCOUPLE MODE:		
*		* *	*		AW DATA AND OB*		6-0, 60-0, AN		
*		* *	*		N CONTINGENCY *		-O TESTS: OH:		
*		* *	*		RT TRAJECTORY *		OH 105, IH-14		
*		* *	*		<b>A</b> *	*DA1	4	*02	
*		* *	*		*	*	•	*	

				WIND	TUNNEL	TEST /	DM	IS DATA	ROCES	SSING				338
TEST ID	* * * REPORT	* * TITLE *	CONFIGURATIONS TESTED	* * *	TEST PURPOSI			YPE OF		SCALE	* * TESTING * AGENCY		COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
			B62C12ES2F10M16V											A.C*DMS-DR-2464
			OW127 (56-0)		AMIC HEA				* 3.0°		*AEDC -		NSFIELD/RI	
	/*HE ARNOLD				HE SPACE				* 8.0	-			- · · · - · · · · · - · · · · · · · · ·	P.A*AUGUST, 198
OH84B	*RING DEVE				DRBITER 1				*		*D TUNNEL (B)	*EDC		*
CR-160,830	O*CENTER-VO				A EXTRAP				*	:	*		L. MULKEY	*
	*FACILITY				R ANALYT				*	,	*		W. KLUG	*
	*A AND B U	TILIZIN *		*RED	ICTIONS	WERE N	1*		*	;	*	*-DN	AS	*
	*G SPACE S	HUTTLE O*		*0T F	FEASIBLE	OR DI	*		*	1	*	*		*
	*RBITER TH			*D N0	OT EXIST	. ALSO	*		*	1	*	*		*
	*THERMOCOU	PLE MODE*			OBTAIN L				*	:	*	*		*
	*LS 56-0,	60-0, AN*		*D Y	AW DATA .	AND OB	<b>}</b> *		*	:	* .	*		*
	*D 83-0 T	ESTS: OH*		*TAI	N CONTIN	GENCY	*		*		*	*		*
	*84B, OH 1	05, IH-1*		*ABOR	RT TRAJE	CTORY	*		*	:	*	*		*
	*02	*		*DAT	A		*		*		*	*		*
	*	*		*			*		*		*	*		*
AEDC -	*RESULTS C	F HEAT T*	B62C12ES2F10M16V	3*TO [	DETERMIN	E AERO	*HEA	T-TRANS	* 0.0	0175/	*ROCKWELL/	*J.V	.FOUST AND	A.C*DMS-DR-2464
HWTB -	*RANSFER T	EST IN T*	OW127 (56-D)	*DYN/	AMIC HEA	TING 0	*		* 3.0	1-	*AEDC -	* . MA	ANSFIELD/RI	<b>*VOLUME 04</b>
V41B-67	/*HE ARNOLD	ENGINEE*		*N TI	HE SPACE	SHUTT	*		* 8.6	0	*HYPERSONIC WII	۱*K.۷	W.NUTT/VKFAD	P,A*AUGUST, 198
OH84B	*RING DEVE	LOPMENT *		*LE (	ORBITER	WHERE	*		*		*D TUNNEL (B)	*EDO	2	*
CR-160.83	1 * CENTER-VO	N KARMAN*		*DAT	A EXTRAP	OLATIC	*		*		*	*T.	L. MULKEY	*
	*FACILITY	TUNNELS *		∗N O	R ANALYT	ICAL P	*		*		*	*G.	W. KLUG	*
	*A AND B U	TILIZIN *			ICTIONS				*		*	*-DN	MS	*
	*G SPACE S				FEASIBLE				*		*	*		*
	*RBITER TH				OT EXIST				*		*	*		*
	*THERMOCOL			_	OBTAIN L	_			*		*	*		*
	*LS 56-0.				AW DATA				*		*	*		*
	*D 83-D T				N CONTIN		-		*		*	*		*
	*84B, OH 1				RT TRAJE				*		*	*		*
	+02	*		*DAT		- · <del>-</del> · · ·	*		*		*	*		*
	*	*		*	-		wk.		*		*	*		*

						)					
			WIND	TUNNEL TES	 r / D	MS DATA	PROCESSING				339
	*	*	*		*		*MODEL	*	*	COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGU * TES	RATIONS * TED *	TEST PURPOSE	*	TYPE OF TEST		-	*	TEST DMS PERSONNEL	*PUBLICATIONS *OR COMMENTS
	*DECIN TE OF HEAT	T+DC0040FE0	E40W4CD4+TD	DETERMINE A	- DO+UE	AT-TDANC	+ 0.0475/	**DOCKWELL /		W FOUCT AND A	C+DMS-DD-0464
	- *RESULTS OF HEAT - *RANSFER TEST IN					AI-IRANS	* 0.01/5/ * 3.01-	*ROCKWELL/ *AEDC -		W.FUUSI AND A ANSFIELD/RI	.C*DMS-DR-2464 *VOLUME 05
	/*HE ARNOLD ENGINE			HE SPACE SH			* 8.0				.A*AUGUST. 1981
05	*RING DEVELOPMENT			ORBITER WHE			*	*D TUNNEL (B)		• • • • • • • • • • • • • • • • • • • •	*
	32*CENTER-VON KARMA		_	A EXTRAPOLA			*	*		L. MULKEY	*
	*FACILITY TUNNELS			R ANALYTICA			*	*	*G.	W. KLUG	*
	*A AND B UTILIZIN	*	*RED	ICTIONS WER	E N*		*	*	*-D!	MS	*
	*G SPACE SHUTTLE	D <b>*</b>	*OT	FEASIBLE OR	DI*		*	*	*		*
	*RBITER THIN SKIN	*	*D N	OT EXIST. A	LSO*		*	*	*		*
	*THERMOCOUPLE MOD	E*	*TO	OBTAIN LIMI	TE *		*	*	*		*
	*LS 56-0, 60-0, A	N*	*D Y	AW DATA AND	0B*		*	*	*		*
	*D 83-0 TESTS: 0	H*	*TAI	N CONTINGEN	CY *		*	*	*		*
	*84B, OH 105, IH-	1*	*ABO	RT TRAJECTO	₹ YS		*	*	*		*
	*02	*	*DAT	A	*		*	*	*		*
	*	*	*		*		*	*	*		*
	- *RESULTS OF HEAT			DETERMINE A		AT-TRANS		*ROCKWELL/			.C*DMS-DR-2464
	- *RANSFER TEST IN			AMIC HEATING				*AEDC -		ANSFIELD/RI	*VOLUME 06
	/*HE ARNOLD ENGINE			HE SPACE SH			* 8.0			-	,A*AUGUST, 1981
02	*RING DEVELOPMENT			ORBITER WHE			*	*D TUNNEL (A)	*ED(	_	*
160,83	33+CENTER-VON KARMAI			A EXTRAPOLA			*	*		L. MULKEY	*
	*FACILITY TUNNELS			R ANALYTICAL			<b>*</b>	*		W. KLUG	*
	*A AND B UTILIZIN			ICTIONS WER			<b>∓</b>	<b>~</b>	* - DI	MO	•
	*G SPACE SHUTTLE ( *RBITER THIN SKIN		_	FEASIBLE OR OT EXIST. A			<b>∓</b>	<b>-</b>	. 🗓		*
	*THERMOCOUPLE MOD			OBTAIN LIMI			<b>-</b>	7 4	*		<b></b>
	*LS 56-0, 60-0, A	_		AW DATA AND	_			<b>-</b> -	*		*
	*D 83-0 TESTS: 0			N CONTINGEN			±	*	*		*
	*84B, OH 105, IH-		_	RT TRAJECTO			*	*	*		*
	*02	*	*DAT		*		*	*	*		*
	~~	*	*		-		•	*			

			WIND TUNNEL TEST	r / DMS DATA	PROCESSING			340
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* 5 * TEST * PURPOSE	*     * TYPE OF     * TEST	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	*PUBLICATIONS
ARC 97SWT 464 0S55/57 CR-167.6	- *AERODYNAMIC VENT - *NG CHARACTERISTI /*S TESTS OF FULL- *CALE SPACE SHUTT 74*E MODEL 81-0 HRS	C*NEL S* L*	PA*TO DEFINE AND L *ERSTAND THE SUP *CE AND INTERNAL *RESSURE RELATIO *HIPS FOR UNDENS	RFA* _ P* DNS*	* 1.72~ * 2.50 * *		*OCKWELL FO*S. R. HOULIHA C *B. J. BURST	ND,R*DMS-DR-2465 *MARCH, 1984 N * *
	*TPS TILES UNDER  *A SIMULATED LAUN *H ENVIRONMENT IN  *THE NAS /ARC 9X7  *FOOT WIND TUNNEL  *(0S55/57)	JC *   * 7 - *	*IED TILES  *  *  *	* * * *	* * * * *	*NITARY)  *  *  *  *	* * * * *	* * * * * * * * * * * * * * * * * * * *
LARC 20HT6 6559 0A257	* - *RESULTS OF INVES - *IGATIONS OF THE /*.010-SCALE OV-10 *CONFIGURATION SF	0*52, N108, N110, N1 02*, R20, V27, W131	11*NENT VEHICLE FO *E AND MOMENT DA *, BASE AND STIR	DRC* ATA* NG-*	**************************************		ERS*C (M*J. E. VAUGHN	/ /RI *DMS-DR-2466 //LAR*VOLUME O1 *JULY, 1983 *
CR-167,6	*LE ORBITER MODEL *T2-0 IN THE NASA *LANGLEY RESEARCH *CENTER 20-INCH N	- * \/*   *  A^*	*CAVITY PRESSUR!  *ATA, AND SPECI/  *THERMOCOUPLE D/  *FROM THE MODEL  *	AL *	* * * *	*ACH 6)  * * *	*G. W. KLUG *-DMS * *	* * *
LARC 20HT6	*CH 6 TUNNEL (DA2 *7) * - *RESULTS OF INVES - *IGATIONS OF THE	* * \$T*B75,C16,E64,F16			* * * *0.010 / * 6.0-	* * * *ROCKWELL/ *LARC -		*
6559 0A257	/*.010-SCALE OV-10 *CONFIGURATION SF 664*ACE SHUTTLE VEH: *LE ORBITER MODEL *72-0 IN THE NASA	02*,R20,V27,W131 0 * IC* - *	*E AND MOMENT DA *, BASE AND STIE *CAVITY PRESSUR *ATA, AND SPECIAL *THERMOCOUPLE DA	ATA* NG-* E D* AL *	* 8.0 * *	*20-INCH HYPE *ONIC TUNNEL *ACH 6)	ERS*C (M*J. E. VAUGHN *G. W. KLUG *-DMS	*JULY, 1983 * * * *
~	*LANGLEY RESEARCH *CENTER 20-INCH N *CH 6 TUNNEL (0A2	1 * AA*	*FROM THE MODEL  * *		* * *	* * *	* * *	* * *
	*	*	*	*	*	*	*	*

,																
						WIND TO	JNNEL TES	<b>-</b> ST /	DMS DATA	PROCES	SING					341
	*			*		*		*		*MODEL		*	*	COGNIZANT	* BAS	_
TEST ID	* *	REPORT	TITLE	* ( *	CONFIGURATIONS TESTED		TEST PURPOSE	* *	TYPE OF TEST		SCALE: RANGE:		*	TEST DMS PERSONNEL	PUBLIC* OR COM*	
.c	- *	RESULTS (	OF AEROT	H <b>*</b> 60-	•от	*TO OB1	TAIN AERO	DYN+H	IEAT-TRANS	S*0.017	75 / 4	*ROCKWELL/	*J. I	MARROQUIN, RI	*DMS-DR	-2467
		ERMODYNAM					HEAT TRAN			*5.25		ARC -		R. HOULIHAN	*AUGUST	
5		TRANSFER					ON THE			*5.25	*	*3.5-FOOT HYPE	R*B.	J. BURST	*	•
103	. *	0.0175-50	CALE MOD	*	4	*0/60T	ORBITER	FUS*		*	*	SONIC WIND TU	N*-DM	5	*	
160,8	34*	ELS 60-01	T AND 56	-*		*ELAGE	AND ON T	THE *		*	*	*NEL	*		*	
		0/601 COM	4				ORBITER			*	*	<b>k</b>	*		*	
		N THE NAS	•				WING, V			*	*	•	*		*	
•		ESEARCH (			•		TAIL, AND			*	×	*	*		*	
		5-F00T H					DURING S	-		*	*	•	*		*	
		WIND TUNN	NEL (IH1	*		*ND STA	GE FLIGH	-1T *		*	×		*		*	
	*	03)		*		*		*		*			*		*	
^	*	OFCULTO 6	SE A 115A	* ****		*		*	TO	*	*	**************************************	*	O COLUMNIAN	************	-0460
C		RESULTS (			TIEK				IEAT-TRANS			ROCKWELL/		R. HOULIHAN J. BURST	*DMS-DR *JUNE.	
		TRANSFER					IG ON THE			*7.3		*ARC - *3.5-FOOT HYPE			*OUNE,	1964
7		RIES IN 1					AT ATTI			-		SONIC WIND TU		•		
6 1105B	•	ARC 3.5 F RSONIC WI					RE DATA E Kist and			*		NEL	± +		*	
84C		L UTILIZI					TA EXTRAF			*	,	* 14C.C.	*		*	
		SHUTTLE O					OF ANALY			*			*		*	
107,0		THIN-SKIN					DICTIONS	-		*	*		*		*	
		OUPLE MOD					ASIBLE	*		*	*	*	*		*	
		AND 83-0				*		*		*	*	×	*		*	
		H84C AND				*		*		*	*	<b>*</b>	*		*	
	*			*		*		*		*	*		*		*	
С	- *	SPACE SHL	JTTLE AF	R*		*TO SUE	BUECT LAF	RGE ~ *P	RESSURE	* 0.80	)- +	ROCKWELL/	∗J.G	.R. COLLETTE/	R*DMS-DR	-2469
TWT	- *	SI LARGE-	-SCALE D	E*		*SCALE	SPECIMEN	4S O*		* 0.88		ARC -	* I		*JUNE,	1982
3-1	/*	VELOPMENT	T TEST U	S*		*F ADV	NCED FLE	XIB*		*		*11-FOOT TRANS			I *	
302A		ING MODEL					JSABLE SL			*		NIC WIND TUNN			*	
-167,3		PECIMENS					ULATION	•		*	*	L (UNITARY)		R. LUTZ	*	
		L 96-0 TE	-				O SSV AS			*	*	•	*-DM	5	*	
		RE IN THE					DYNAMIC			<b>∓</b>	*	<b>K</b>	*		*	
		SEARCH CE					GRADIEN1			<i>*</i>	*		<b>∓</b>		* •	
		11-FOOT TUNN					& TURBL			<u>.</u>	*		*		-	
			VEL (U53	*			ELS FOR			±		•	*		*	
		02A)		<b>-</b>			TIONS EC TO 100 M	-		*			- *		*	
	- <b>-</b> -			*			ITH A SC			*	3	- <b>t</b>	*		*	
	. ≠			*			FOUR (40			*	7	•	*		*	
	*			*		*15510N		.υ .ભ∓ *		*	3	•	*		*	
	*			*		*		**				•				

	WIND TUNNEL TEST /	/ DMS DATA	PROCESSING			342
* *	*	*	*MODEL		* COGNIZANT	* BASIC
TEST * * CONFIGURATIONS	* TEST	* TYPE OF		* TESTING	* TEST DMS	*PUBLICATIONS
ID * REPORT TITLE * TESTED	* PURPOSE	* TEST	*MACH RANGE		* PERSONNEL	*OR COMMENTS
ARC - *SPACE SHUTTLE LRS*LRSI (THIN TILE)	*TO EVALUATE THE I	E*PRESSURE	* 0.83-	*ROCKWELL/	*R.B. KINGSLAND/	RO*DMS-DR-2470
11TWT - *I THIN TILE TEST *	*FFECTS OF AN EXPA	<b>A</b> *	* 0.88	*ARC -	*CKWELL	*AUGUST, 1983
145-1 /*IN THE NASA/AMES *	*NSION/RECOMPRESS	[*	*	*11-FOOT TRAN	SO*C. BERTHOLD/ROC	KW*
OS31A *RESEARCH CENTER 1*	*ON SHOCK ON A SAM	VI*	*	*NIC WIND TUN	NE*ELL	*
CR-167,658*1X11-FOOT UNITARY*	*PLE OF LOW TEMPER	₹*	*	*L (UNITARY)	*S. R. HOULIHAN	*
*PLAN WIND TUNNEL *	*ATURE REUSABLE SI	J*	*	*	∗G. R. LUTZ	*
*USING TEST FIXTU *	*RFACE INSULATION	*	*	*	*-DMS	*
*RE 96-0 (OS31A) *	*(LRSI) THIN TILES	S*	*	*	*	*
* *	*SIMULATING THE R	*	*	*	*	*
* *	*EGION OF THE SPACE	C*	*	*	*	*
* *	*E SHUTTLE ORBITES	R*	*	*	*	*
* *	*OVER THE CANOPY.	*	*	*	*	*
* *	*	*	*	*	*	*
LARC - *RESULTS OF TESTS *LAUNCH VEHICLE -	*TO DETERMINE PRES	S*PRESSURE	*.02 /	*LARC /	*W.I. SCALLION/L	.AR*DMS-DR-2471
16TT - *ON A .O2 SCALE SP*89DTS	*SURE DISTRIBUTION	<b>V</b> *	*1.1 -	*LARC -	*C	*JAN., 1981
341 /*ACE SHUTTLE LAUNC*	*ALONG THE EXTERN	*	*1.25	*16-FOOT TRAN	SD*J. E. VAUGHN	*
LA132 *H VEHICLE MODEL (*	*AL TANK LOX CABL	E*	*	*NIC TUNNEL	*C. R. EDWARDS	*
CR-160,514*890TS) IN THE LAR*	*TRAY	*	*	*	*-DMS	*
*C 16-FT TRANSONIC*	*	*	*	*	*	•
*WIND TUNNEL TO D *	*	*	*	*	*	*
*ETERMINE PRESSURE*	*	*	*	*	*	*
*DISTRIBUTION ALO *	*	*	*	*	*	*
*NG THE EXTERNAL T*	*	*	*	*	*	*
*ANK LOX CABLE TRA*	*	*	*	*	*	*
*Y (LA132) *	*	*	*	*	*	*
* *	*	*	*	*	*	*
AEDC - *RESULTS OF AN ORB*B75C16E64F16M52W				*ROCKWELL/	*J.A.COLLINS/RI	*DMS-DR-2472
SWTA - *ITER SILTS POD HE*31V29	*RANSFER COEFFICI			*AEDC -	*K.W.NUTT/ARO,IN	IC *MAY, 1980
V41B-65 /*AT TRANSFER AND F*B75C16E64F16M52W	1*NTS ON THE SILTS	*			IN∗J. E. VAUGHN	*
OH4OO *LOW FIELD TEST US*31V31	*TAIL CONFIGURATI		*	*D TUNNEL (A)		*
CR-160,494*ING A 0.0175-SCAL*	*N OF A SCALED SP		*	*	*-DMS	*
*E SPACE SHUTTLE O*	*CE SHUTTLE ORBIT	E*	*	*	*	*
*RBITER(92-0) IN T*	*R MODEL	*	*	*	*	*
*HE AEDC VKF HYPER*	*	*	*	*	*	*
*SONIC WIND TUNNEL*	*	*	*	*	*	*
*B (0H400) *	*	*	*	*	*	*
* *	*	*	*	*	*	*

																	046
						WIND T	UNNEL TES	τ / 	DMS DATA	PROCES	SSING						343
÷	*			*		*		*		*MODE1		*	*	•	COGNIZANT		SIC
TEST	*	REPORT	TITLE	* (	CONFIGURATIONS TESTED		TEST PURPOSE	*	TYPE OF TEST		SCALE:			· ·	TEST DMS PERSONNEL		CATIONS
3	- */	EDUDANA	MIC LOAD	C+TD	S TILE CAVITY	E*TN NE	TERMINE D	DEC*1	DESCHE			*ROCKWELL	/ *	D R	.KINGSLAND,RI	*DMS-D	D-2473
				-	FIELD MODEL		TRIBUTION	_	RESSORE	*		*ARC			E. VAUGHN	*VOLUM	
2-1			SHUTTLE				E OML, TI			*		*2-F00T B				*JAN.,	1983
252	*(	RBITER	TILE ARR	A *		*CAVIT	Y AND ON	SID*		*		*OT TRANS	ONIC W*	-DMS	S	*	
167,3			(106-0)				TILE SUR			*	:	*IND TUNN	IEL +			*	
			SA/ARC 2				CAVITY;			*		*	*	t		*	
			NSONIC W				N PRES. V			*		*	*			÷	
	*	אט וטואוענ	L (DA252	) <del>*</del>			IS DUE TO GHT MISMA			*		*	•			*	
	*			*			ATIONS IN			*		*	*	t		*	
	*			*			TH, AND V			*		*	*	t		*	
	*			*			IN RN/FT			*	:	*	*	t	•	*	
	*			*		*D BOU	INDARY LAY	ER *		*		*	*	t		*	
	*			*		*THICK	NESS	*		*	1	*	*	t		*	
	*	. <b>.</b>		*		*		*	<b></b>	*	1	*	*			*	
					S TILE CAVITY				PRESSURE	*		*ROCKWELL	•		.KINGSLAND,RI		
	_				W FIELD MODEL		TRIBUTION			*		*ARC			E. VAUGHN	*VOLUM *JAN.,	
!-1 !52	-		SHUTTLE TILE ARR				E OML, TI Y AND ON			*		*2-FOOT B *OT TRANS				*UAN.,	1900
-			(106-0)				TILE SUR			-		*IND TUNN		· - DM.	3	*	
107,3			SA/ARC 2				CAVITY:			*		*	*			*	
			NSONIC W				N PRES. V			*	:	*	*	t		*	
			L (DA252	-			S DUE TO			*	;	*	*	r		*	
	*		•	*			GHT MISMA			*		*	*	t		*	
	*			*		*,VARI	ATIONS IN	GA*		*	1	*	*	t .		*	
	*			*		*P WID	TH, AND V	ARI*		*	:	*	*	•		*	
	*			*			IN RN/FT			*	;	*	*	•		*	
	*			*			NDARY LAY	ER *		*	1	*	*			*	
				*		*THICK	NE 22	*		*		*	*			* _	
С	- ±	FSIII TS	OF TESTS	*0PF	BITER ALONE	*DETED	MINE WAYS	TOME	EUBCE	* .004	4 / :	*MSFC	/ *	WF	. BRADDOCK/LMS	*nMS-n	D-2474
					JNCH CONFIGURA				JAGE	*0.60		*MSFC	•	C	. DIRACOUNT LPI	*JULY.	
•				_	N (NO PROTUBER					* 1.25		· · • · ·		_	E. VAUGHN	*	
8	-				S ON ET)	*LOADS		*		*		*IC WIND				*	
160.8					JNCH CONFIGURA			S D*		*	,	*		-DMS		*	
			/MSFC 14		١	*ATA O	BTAINED A	T A*		*	1	*	*			*	
			ISONIC W			*EDC		*		*		*	*			*	
	*1	ND TUNNE	L (FA28)	*		*		*		*	,	*				*	
	*			*		*		*		*	,	*	*	:		*	

						WIND	TUNNEL TEST	/ DMS D	ATA	PROCESS	ING					344
	*			 *		*		* ,		*MODEL		<del></del>	*	COGNIZANT	* BAS	IC
TEST				* CO	NFIGURATIONS	*	TEST	* TYPE				* TESTING	*	TEST DMS	*PUBLICA	_
ID	* 	REPORT	TITLE	* 	TESTED	* 	PURPOSE	* TES	T	*MACH R	RANGE	* AGENCY	* 	PERSONNEL	*OR COM	MENTS
LARC 16TT			INTEGRAT		CH VEHICLE (		ERMINE DETAI EASUREMENTS			* 0.02 * 0.9-		*LARC / *LARC -		I.SCALLION/LA E. VAUGHN	RC*DMS-DR AUGUST*	
342			AT FOUR		3)		SSURES ON TH			* 1.25		*LARC - *16-FOOT TRAN			*AUGUST	, 1960
LA140	•		ON THE S				FEEDLINE AT			+ 1.25		*NIC TUNNEL	430+d. D-*		*	
			TTLE TANK				STATIONS	*		*		*	*		*	
J. 100,			LINE (LA			*	· JIAIIONS	*		*		*	*		*	
		140)	LINE (LA	*		*		*		*		*	*		*	
	*			*		*		*		*		*	*		*	
LARC	- *	RESULTS	OF INVEST	*ORBI	TER 74-0	*T0	(1)DETERMINE	O*FORCE		* 0.004	1 /	*LARC /	*R.	L. CALLOWAY/L	AR*DMS-DR	-2477
20HT6			ON AN O.				TER DIRECTIO			*6.0		*LARC -	*C		*JUNE,	1981
6546			E 140C MO				TABILITY AND			*6.0		*20-INCH HYPI	RS∗J.	E. VAUGHN	*	
LA141A/	B `+	DIFIED C	ONF I GURAT	*		*ONT	ROL CHARACTE	RI*		*		*ONIC TUNNEL	(M*C.	R. EDWARDS	*	
CR-160.	825+	ION SPAC	E SHUTTLE	*		*STI	S FROM 20-4	10 *		*		*ACH 6)	*-D	MS	*	
	*	VEHICLE	ORBITER	*		*ANG	LE OF ATTACK	<b>(</b> *		*		*	*		*	
	*	MODEL (7	4-0) IN T	*		*(2)	TEST ANGLES	OF*		*		*	*		*	
	*	HE NASA/	LANGLEY R	*		*ATT	ACK AND SIDE	ES *		*		*	*		*	
	*	ESEARCH	CENTER 20	*		*LIP	FOR CONTING	GEN*		* .		*	*		*	
			CH 6 TUNN	*		*CY	ABORT, (3)TE	EST*		*		*	*		*	
	. *	EL (LA14	1)	*		*SMA	LL NEGATIVE	A *		*		*	*		*	
	*	•		*		*NGL	E OF ATTACK	IN*		*		*	*		*	
	*	•		*			MENTS TO VER			*		*	*		*	
	*	•		*			THER RESULTS	- •		*		*	*		*	
	*			*			ALIDATE MACH	H=6*		*		*	*		*	
	*			*		*DAT	4	*		*		*	*		*	
	*			*		*		*		*		*	*		*	
LARC					16E64F16FR22							*LARC /		RNARD SPENCER		
UPWT					2N108N109N11					* 2.		*LARC -		/LARC	*VOLUME	
1299			FFECT OF				RUDDER EFF			*5 4.				ORGE M. WARE	LA*AUGUST	, 1980
LA131					VT 1 1VT 12VT 13					* .		*IND TUNNEL	*R0		*	
CR-160.			CONTROL		T 15VT 16VT 17W					*		*	*G.	W. KLUG	*	
			MODEL 10				N FILLED AND ED OPEN SPEI			# _		*	*-L	MO	-	
			E SHUTTLE				E. DETERMINI			:		•			±	
			TESTED I				CT OF SILTS			*		*	*		*	
			SA/LARC 4				N AERO CHAR.			*		*	*		*	
			ITARY PLA				HE ORBITER.			*		*	*		*	
			UNNEL (LA				EMENT CONTRO			*		*	*		*	
		131)		*			ECTIVENESS (			*		*	*		*	
	*	,		*		*A	, 1 7 5,1655	*		*		*	*		*	
				*		*		*		*		*	*		*	

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			WIND TUNNEL TEST /	DMS DATA	PROCESSING			345
TEST * ID *	REPORT TITLE	* * CONFIGURATIONS * TESTED	* TEST * PURPOSE	* * TYPE OF * TEST	*MODEL  * SCALE  *MACH RANGE	* * TESTING * AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
WT - *L 99	JDDER EFFECTIVENISS AND EFFECT OF SILTS POD ON A OPEN-SCALE (REMOTEL OF SURFACE) MODEL 103-0 SPACE SHUTTLE OF SURFACE) MODEL 103-0 SPACE SHUTTLE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFACE OF SURFAC	E*G1M52N108N109N110 *N111R20V27 L*VT10VT11VT12VT13' L*T14VT15VT16VT17W *31 O* E* * 4* A*	H*THE TEST OBJECTIV D*ES WERE TO DEFINE *ORB RUDDER EFFEC V*TIVENESS, DETERMI 1*NE AERO DIFF. BET *WEEN FILLED AND S *CALED OPEN SPEEDB *RAKE, DETERMINE E *FFECT OF SILTS PO *D ON AERO CHAR. O *F THE ORBITER, SU *PPLEMENT CONTROL	* *  *  *  *  *  *  *  *  *  *  *  *  *	* 0.2/ * 2 *5 4. * * * *	*LARC / *LARC - *UNITARY PLAN V *  *  *  *  *  *  *  *  *  *  *  *  *	*BERNARD SPENCER C *R./LARC V*GEORGE M. WARE/LA *RC *G. W. KLUG *-DMS * * *	*VOLUME 02
* RC - *  WT - *  199 /* 131 * -160,505*2	JDDER EFFECTIVENE SS AND EFFECT OF SILTS POD ON A O.	E*G1M52N108N109N110 *N111R20V27 .*V110VT11VT12VT13V L*T14VT15VT16VT17W *31	*EFFECTIVENESS DAT  *A  *  *  *  *  *  *  *  *  *  *  *  *	* * *FORCE * * * * *	*	*IND TUNNEL *	*  * *BERNARD SPENCER C *R./LARC *GEORGE M. WARE/LA *RC *G. W. KLUG *-DMS *	*VOLUME 03
*( ** **	STATE SHOULD SPACE SHOULD BORBITER TESTED IN THE NASA/LARC 4-FOOT UNITARY PLAN WIND TUNNEL (LAN 131)	* 4* A*	*RAKE, DETERMINE E *FFECT OF SILTS PO *D ON AERO CHAR. O *F THE ORBITER, SU *PPLEMENT CONTROL *EFFECTIVENESS DAT *A *	)* )*  * *	* * * * * * * * * * * * * * * * * * * *	* * * * * * *	*	* * * * * * *

			WIND 1	TUNNEL TEST	/ [	MS DATA	PROCESS	ING				346
* TEST * ID * RE	* * PORT TITLE *	CONFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF TEST	*MODEL * S *MACH R	CALE,		* * *	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
3.5HWT - *RANS 250 /*THE : IH104 *SECOI CR-167,657*ENT *EEST *AND *ASA/ *HWT ! *175- *0-OT	SPACE SHUTTLE* ND STAGE ASC * VEHICLE AT FR* REAM MACH=5.3* 7.3 IN THE N * ARC 3.5-FOOT * USING THE O.O* SCALE MODEL 6* (IH104) *		*IVE   *RATE *NS OF *ARREF *E SHE *L TAF *STAGE *DITIC *DES ! *DURIF *ESTS	STAIN CONVECTION HEAT-TRANSFE DISTRIBUTION IN THE UPPER L OF THE SPA JITLE EXTERN IN FOR SECON E ASCENT CON DNS AT ATTIT NOT ATTAINED ING PREVIOUS	R* B* C* ID* I * I * I * I * I * I * I * I * I * I		* 5.3 - * 7.3 * * * * * * * * * * * * * * * * * * *	: :	*ARC - *3.5-FOOT HYPER *SONIC WIND TUP *NEL * * * * * * * * * * * * * *	*J.F ** * * * * * * * * *	BERTHOLD,RI	
14TWT - *IN T 665 /*14-I IA602 *WIND CR-167,377*0.00 *(74- *AUGM *HUTT	LTS OF TESTS *01 HE NASA/MSFC *01 NCH TRISONIC *01 TUNNEL ON A *NO 4-SCALE MODEL*01 OTS) THRUST *A1 ENTED SPACE S* LE INTEGRATED* CLE (1A602) *	TS + LBM TS + LBM + FAIRI GS + LBM + WAX F TRING	*EMEN *IC L( *ITHO! *AUGM! *IDED	UT THE THRUS	/M* W* ST* OV*	ORCE	*0.004 *0.60 *4.96 * * *	• • .	*ROCKWELL/ *MSFC - *14-INCH TRISO *IC WIND TUNNE * * *	*G. N*-DN	E. VAUGHN R. LUTZ AS	*DMS-DR-2481 *JUNE, 1983 * * * * * * * *
11TWT - *FOR 427-1 /*, PR 427-2 /*ROEL 0A400 *ING CR-160,814*LE P *SPAC *BITE *) IN *11 F	E SHUTTLE OR * R MODEL (47-0* THE NASA/ARC* OOT UNITARY * WIND TUNNEL,*		*S IN *H AN *TS P *102 *TED *AIN *BUTE *AND *EFFE *L TA *CITY *IREC *TERI	BTAIN AIRLOAFORMATION WID WITHOUT SIOD, OBTAIN OWING DISTRICATION OF AIRLOADS AND COMMENTS, TO DETERMINE OF OF VERTICATIONAL CHARASTICS OF THE TER VEHICLE	IT * P IL * * * * * * * * * * * * * * * * * * *		* .03 * .6 * 1 .4 * * * * * * * * * * * * * * * * * * *		* *ROCKWELL/ *ROC - *11-FOOT TRANS *NIC WIND TUNN *L (UNITARY) * * * * * * * * * * * * * * * * * * *	*. H O*S.	KANEVSKY/R.I. R. HOULIHAN R. EDWARDS	**DMS-DR-2482 **VOLUME O1 **JAN., 198 * * * * * * * * * * * * * * * * * * *

					WIND	TUNNEL T	EST /	DMS DATA	PROCE	SSING					347
	*		*		*		*		*MODE	 L	*	*	COGNIZANT	* BAS	IC
TEST ID	* * RI	EPORT TITLE	*	CONFIGURATIONS TESTED	*	TEST PURPOSE	*	TYPE OF		SCALE RANGE		*	TEST DMS PERSONNEL	*PUBLIC *OR COM	
				RBITER - 470		BTAIN AI			* .03		*ROCKWELL/		SPANGLER AND		
		FORCE, MOM						PRESSURE	*.6	-	*ARC -		KANEVSKY/R.I.	*VOLUME	_
27-1		RESSURE AND				D WITHOU			*1.4		*11-FOOT TRANS			∗JAN.,	1981
7-2	•	LASTIC DATA	_			OD, OBTA			*		*NIC WIND TUNN			*	
400		THE 0.030 S				WING DIS			*		*L (UNITARY)	*-D	MS	*	
1-160,8		PRESSURE LOA				AIRLOADS	•		*		*	. *		*	
		CE SHUTTLE (				ELEVON D			# 		*	*		*	
		ER MODEL (47				D AIRLOA			*		*	<del>*</del>		-	
	-	N THE NASA/A FOOT UNITARY				NGE MOME TO DETER			- -		*	•		*	
		N WIND TUNNS				CT OF VE			*		<b>*</b>	*		*	
	*(OA4		*			IL AEROE			*		*	*		*	
	*	100)	*			ON LATE			*		*	*		*	
	*		*			TIONAL C			*		*	*		*	
	*		*			STICS OF			*		*	*		*	
	*		*			TER VEHI			*		*	*		*	
	*		*		*		*		*		*	*		*	
C -	- *RESI	ULTS OF TEST	rs *0	RBITER - 470	*T0 0	BTAIN AI	RLOAD*	FORCE	* .03	/	*ROCKWELL/	*R.	SPANGLER AND	A*DMS-DR	-2482
		FORCE, MOME			*S IN	FORMATIO	N WIT*	PRESSURE	*.6	-	*ARC -	*.	KANEVSKY/R.I.	*VOLUME	
7-1	/*, PF	RESSURE AND	AE*		*H AN	D WITHOU	T SIL*		*1.4		*11-FOOT TRANS			*JAN.,	1981
7-2	•	LASTIC DATA				OD, OBTA			*		*NIC WIND TUNN			*	
400		THE 0.030				WING DIS			*		*L (UNITARY)	*-D	MS	*	
-160,8		PRESSURE LOA				AIRLOADS			*		*	*		*	
		CE SHUTTLE C				ELEVON D			*		*	*		*	
		ER MODEL (47				D AIRLOA			*		*	*		*	
		N THE NASA/A				NGE MOME			*		*	*		* .	
		FOOT UNITARY				TO DETER			*		*	*		*	
		N WIND TUNNE	,*			CT OF VE			*		<del>*</del>	Ŧ		*	
	*(OA4	+ <del></del>	<b>∓</b>			IL AEROE ON LATE			-		T *	*		<b>-</b>	
	*		·			TIONAL C			*		*	*		*	
	*	•	*			STICS OF			*		*	*		*	
	*		*		_	TER VEHI			*		*	*		*	
	*		*		*		*		*		*	*		*	

					WIND	TUNNEL TEST	/	DMS DATA	PROCE	SSING					348
	*		*		*		*		*MODE!		*	*	COGNIZANT	* BASI	
TEST	*	REPORT TI		CONFIGURATIONS TESTED		TEST PURPOSE		TYPE OF			* TESTING * AGENCY	*	TEST DMS PERSONNEL	*PUBLICA *OR COMM	
				162160	*			TEST	*MACH	KANGE	* AGENCY	· ·	PERSUNNEL	*UK COM	
AEDC	- *	RESULTS OF	A TEST*		*T0	CERTIFY THE 1	P*1	FORCE	*1.0	/	*ROCKWELL/	*S	.C. CARRION/RI	*DMS-DR-	-2483
		OF THE FULL			_	ILES COVERING			* 0.8	-	*AEDC -		.L. STEVENS/RI		-
F-556		E NASA ORBI				FIN/RUDDER (			* 1.4	0			. R. HOULIHAN	*JUNE,	1982
JS49		RTICAL TAIL			-	EGION OF THE			*		*ULSION WIND			* .	
CR-167,		_ 111-0) IN				ORBITER VERT	<b>I</b> *		*		*NNEL (PWT-16	ST)*-l	DMS	*	
		EDC 16 FOOT			*CAL	TAIL.	*		*		*	*		*	
		SION WIND	TUNNEL*		*		*		*		*	*		*	
	* (	(OS49)	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
AEDC		RESULTS OF			*TO	CERTIFY THE 1	[P*I	FORCE	+1.0	/	*ROCKWELL/		.C. CARRION/RI		
PWT16T		OF THE FULL	_		-	ILES COVERING	_		* 0.8	-	*AEDC -		.L. STEVENS/RI		
TF- <b>5</b> 56		E NASA ORBI				FIN/RUDDER (			* 1.4	0			. R. HOULIHAN	*JUNE,	1982
OS49		RTICAL TAIL			*PR	EGION OF THE	N*		*		*ULSION WIND			*	
CR-167	, 358+1	L 111-0) IN	THE A*		*ASA	ORBITER VERT	I *		*		*NNEL (PWT-16	ST)*-I	DMS	*	
		EDC 16 FOOT			*CAL	TA269	*		*		*	*		*	
	*	L523[ %2[&	1[[]6*		*		*		*		*	*		*	
	*	,3\49.	*		*		*		*		*	*		*	
	*		*		*		*		*		*	*		*	
ARC	- *	RESULTS OF	VENT P*C	ALIBRATION PANEL	.*DET	ERMINE AIRLO	1# Q	PRESSURE	*FULL	/	*ROCKWELL/		. B. KINGSLAND	'R*DMS-DR	-2485
11TWT	- *(	ORT TPS LOA	DS TES*H	RSI PANEL	*S D	ISTRIBUTION (	)N*	FORCE	<b>*</b> 0.	-	*ARC -	*0	CKWELL	*JUNE,	1982
425		TS IN THE A		RSI PANEL		MATERIAL ARC			*1.4				. R. HOULIHAN	*	
425-1		SEARCH CENT			*UND	VENT PORTS I	<b>1/</b> *		*		*NIC WIND TU	NE∗B	. J. BURST	*	
OS50	*(	C) 11X11-FO	*NIW TO		*AND	W/O JET MASS	<b>*</b>		*		*L (UNITARY)	*-	DMS	*	
OS5OA		) TUNNEL US			*FLO	W, AND TO CE	₹ *		*		*	*		*	
CR-167,	361*	DEL 113-0 (	0S50/ <b>0</b> *		*TIF	Y HRSI TILES	<b>A</b> *		*		*	*		*	
	*:	550A)	*		*ND	FRSI TO 1.4	<b>[1</b> *		*		*	*		*	
	*		*		*MES	DESIGN DYNA	4I*		*		*	*		*	
	*		*		*C P	RESSURES(ULT:	: M*		*		*	*		*	
	*		*		*ATE	) AIRLOADS	*		*		*	*		*	
	. *		*	•	*		*		*		*	*		*	

REPORT TITLE						PROCESSING			
TEST		*	*	* *			* *		
ST - *UNNEL TEST 0A253 *2N94R18U2V23W129 *STATIC & FLUCTUAT*	TEST ID	* * REPORT TITLE							*PUBLICATIONS *OR COMMENTS
ST - *UNNEL TEST 0A253 *2N94R18U2V23W129 *STATIC & FLUCTUAT*		+DECIUTE OF WIND I		DATO DETERMINE THE A	DDECCUDE	*0.035 /	+nncvw=11/ 4	. I A DIACU/ADVINI	*DMC_DD_2496
**IN THE AEDC 16-T *\$28	-					* 0.65	•		
### PROPULSION WIND T*T40						* 1.50			
*35-SCALE SS LAUNC* *TECTION SYSTEM (T* * * * * * * * * * * * * * * * * * *									*
** VEHICLE MODEL 8*	167,368	*UNNEL USING A O.O	)*	*FYING THERMAL PRO*		*	*NNEL (PWT-16T)*	G. W. KLUG	*
**-OTS & ENTRY VEH*		*35-SCALE SS LAUNC	*	*TECTION SYSTEM (T*		* .	* *	-DMS	*
*ICLE MODEL 84-0 * * ********************************		*H VEHICLE MODEL 8	<b>]</b> *	*PS) TILES IN CONT*		*	* *	•	*
* * * *TICAL TAIL, & TO * * * * * * * * * * * * * * * * * *				*ROL SURFACE GAPS *		*	* *	ı	*
* * * *PROVIDE STATIC PR* * * * * * * * * * * * * * * * * * *		*ICLE MODEL 84-0	*			*	* *	•	*
* * * * * * * * * * * * * * * * * * *		*	*			*	* *	•	*
* * * * * * * * * * * * * * * * * * *		*	*			*	* *	•	*
* * * * ** ** ** ** ** ** ** ** ** ** *		*	*			*	* *		*
* * * *VON/WING TIP, ETC.* * * * * * * * * * * * * * * * * * *		* •	*			*	* *		<b>+</b>
* * * * * * * * * * * * * * * * * * *		-	:			*	* *		*
### ### ##############################		-	-	+VONYWING TIP,ETC.+		-		•	<b>-</b> ±
### ### ##############################	ос -	*PESILITS OF WIND T	**************************************	**************************************	DDFCCIIDF	*0.035 /	*POCKMEII/ *	A RIACK/ARVIN/	*DMS-DD-2486
/*IN THE AEDC 16-T *\$28							•		
## ## ## ## ## ## ## ## ## ## ## ## ##									
### ### ##############################									*
*35-SCALE SS LAUNC*									*
*H VEHICLE MODEL 8*						*			*
*4-OTS & ENTRY VEH*						*	* *		*
*ICLE MODEL 84-0 * *ON THE WING & VER* * * * * * * * * * * * * * * * * * *						*	* *	ţ	*
*						*	* *	, `	*
*		*	*	*TICAL TAIL, & TO *		*	* '*	r	*
*		•	*	*PROVIDE STATIC PR*		*	* *	•	*
*	•	*	*	*ESSURE DATA FOR A*		*	* *	•	*
		*	*			*	* *	•	*
*		*	*			*	* *	1	*
TWIN HAITM I ALL PELOS		*	*	*VON/WING TIP,ETC.*		*	* *	t	*
• • • • • • • • • • • • • • • • • • • •		*	*	* *		*	* *	•	*
The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		* * * * * *	* * * * * * * * * * * * * * * * * * *	*PROVIDE STATIC PR* *ESSURE DATA FOR A* *IRLOADS ANALYSIS *		* * * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * * *		* * * * * * *

						WIND	TUNNEL TEST	_/	DMS DATA	PROCES	SING					350
	*			*		*		*		*MODEL		k	*	COGNIZANT	* BASI	c
TEST	*			* C	ONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE*	* TESTING	*	TEST DMS	*PUBLICA	TIONS
ID	*	REPORT	TITLE	*	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE*	* AGENCY	*	PERSONNEL	*OR COMM	IENTS
RC	- *DF	ST 1112	OF AMES	G*HDS	I TILED PANEL	*T0	DEMONSTRATE	THE	DESCUDE	* 70	١	*ROCKWELL/	*D 6	B. KINGSLAND/R	ก*กพร-กษ	2487
			R TESTS		1 TILLS TRIVEL		THE TILES AN		KESSOKE	* .88		ARC -		WELL	*OCT.,	
80-1			T FIXTUR	-			FILLERS REM			*		11-FOOT TRANS			*	
36-1,3			THE NASA				ATTACHED TO			*		NIC WIND TUNN			*	
\$43	*//	AMES 11	X11-F00T	*		*HE	STRUCTURE UN	IDE*		*		*L (UNITARY)	* - D!	MS	*	
S5 1	*TL	JNNEL (	0543,055	51*		*R S	IMULATED FLI	GH*		*		<b>,</b>	*		*	
S5 1B	*,0	0551B,0	S51C)	*		*T E	NVIRONMENTS	*		*		<b>k</b>	*		*	
S51C	*			*		*		*		*	*	<b>*</b>	*		*	
R-167,3	62*			*		*		*		*	2	ŧ	*		*	
	*			*		*		*		*	,	*	*		*	
RC					SI PANEL		HER INFORMAT		PRESSURE	*0.8		*ROCKWELL/		B. KINGSLAND,		
					IBRATION PANEL			-		*1.4		*ARC -		GEE, RI	*SEPT.,	1981
58			UTTLE AF				CTION OF AFR			*		*2-FOOT BY 2-F			*	
S300			RIAL USI				NKET CONFIGU			*		*OT TRANSONIC		-	*	
K-160,8			115-0 IN				ON SUITABLE			*	,	*IND TUNNEL	*-DI	MS	*	
			/AMES RE				UBSEQUENT MA			*		*	*		*	
			NIER ZAZ				L CHARACTERI			# _	,	•	Ŧ		-	
			L (05300	-			IN AND SYSTEM IFICATION TE			-		•	Ī.		<u>.</u>	
	**	JONNE	L (03300	,, <u> </u>			GRAMS	*		-		<b>T</b> ♣	-		- T	
	*			*		*	GRAMS	*		*		•	*		*	
EDC	- *RF	SULTS	OF A WIN	1D *			DETERMINE TH	4F *!	PRESSURE	*1.0	,	*ROCKWELL/	*R !	H. SPANGLER/RI	*DMS-DR	-2489
			EST ON T				AK-AWAY CHAR			* 0.0		*AEDC -		G. MEYER/CALSP		
F-608			SHUTTLE				RISTICS OF TH			* 0.4	-	*TRANSONIC PRO			*	
556	-	_	L PURGE				ORBITER UMBI			*		*ULSION WIND T		R. HOULIHAN	*	
₹-167.5			N THE AE	-			PURGE CURTA			*		*NNEL (PWT-16T			*	
-	*C	16-T P	ROPULSIO	N*			ING LAUNCH.	*		*		*	*-D	MS	*	
			NEL (PWT			*		*		*	1	*	*		*	
	*),	, USING	MODEL 1	10*		*		*		*	:	*	*		*	
	*8	-0 (055	6)	*		*		*		*	:	*	*		*	
	*			*		*		*		*	:	*	*		*	

			WIND	TUNNEL TEST /	DMS DATA	PROCESSING			351
TEST ID	* * * REPORT TITLE		* SURATIONS * STED *	TEST PURPOSE	* * TYPE OF * TEST	*MODEL * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
H109	- *TEST RESULTS FF - *THE NASA/ROCKWE /*L INTERNATIONAL *PACE SHUTTLE O. 49*75-SCALE ORBITE *MODELS 56-0/60- *AND O.04-SCALE *BITER FOREBODY *DEL 83-0 CONDUC *D IN THE AEDC/V *-B 50-INCH HYPE *ONIC WIND TUNNE *(TESTS OH109 & *109B)	EL *56-0 _ S*83-0 .01* ER * -0 * .0R* MO* .7KF* .7KF* .7KF*	*NAL *EATI *NER *REVI *FOR	BTAIN ADDITIONAL AERODYNAMIC HONG DATA IN FINDETAIL THAN POUSLY TESTED ORBITER STS-10 Y YAW ANGLES	* * *		*AEDC - *HYPERSONIC WIN	*JIM A. COLLINS, *IM GEE, ROCKWELL !*KENNETH W. NUTT, *AEDC(CALSPAN) *S. R. HOULIHAN *B. J. BURST *-DMS * * * * * * * * * * * * *	*VOLUME 01
H109	* TEST RESULTS FR - *THE NASA/ROCKWE /*L INTERNATIONAL *PACE SHUTTLE O. 500*75-SCALE ORBITE *MODELS 56-0/60- *AND O.04-SCALE *BITER FOREBODY *DEL 83-O CONDUC *D IN THE AEDC/V *-B 50-INCH HYPE *ONIC WIND TUNNE *(TESTS OH109 & *109B) *	EL *56-0 _ S*83-0 O1* ER * O * OR* MO* CTE* CKF* ERS*	*NAL *EATI *NER *REVI *FOR	BTAIN ADDITIONAERODYNAMIC HONG DATA IN FINDER STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF THE STATE OF TH	* * * *	* *0.0175 , *0.04 / *8.0 - *8.0 * * * * * * * * * * * * * * * * * * *	*HYPERSONIC WIN	* *JIM A. COLLINS, *IM GEE, ROCKWELL !*KENNETH W. NUTT, *AEDC(CALSPAN) *S. R. HOULIHAN *B. J. BURST *-DMS * * * * * * * * * * * * * * * * * * *	*VOLUME 02

			WIND TUNNEL TES	T / DMS DATA	PROCESSING			352
	*	*	*	*	*MODEL *		* COGNIZANT	* BASIC
TEST	*	* CONFIGURATIONS		* TYPE OF		TESTING	* TEST DMS	*PUBLICATIONS
ID	* REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE*	AGENCY	* PERSONNEL	*OR COMMENTS
AEDC	- *TEST RESULTS FR	OM+60-0	*TO OBTAIN ADDI	TIO*PRESSURE	*0.0175 , *	ROCKWELL/	*JIM A. COLLINS,	J*DMS-DR-2490
HWTB	- *THE NASA/ROCKWE	L *56-0	*NAL AERODYNAMI	C H*	*0.04 · / *	AEDC -	*IM GEE, ROCKWELL	. *VOLUME O3
V41B-G9	/*L INTERNATIONAL	S*83-0	*EATING DATA IN	FI*	*8.0 - *	HYPERSONIC WIN	N∗KENNETH W. NUTT,	*JULY, 1982
OH109	*PACE SHUTTLE O.	01*	*NER DETAIL THA	N P*	*8.0 *	D TUNNEL (B)	*AEDC(CALSPAN)	*
CR-167,3	51*75-SCALE ORBITE	R *	*REVIOUSLY TEST	ED *	* *		*S. R. HOULIHAN	*
	*MODELS 56-0/60-	0 *	*FOR ORBITER ST	S-1*	* *	•	∗B. J. BURST	*
	*AND O.O4-SCALE	OR*	*ENTRY YAW ANGL	ES *	* *		*-DMS	*
	*BITER FOREBODY	MO*	*	*	* *		*	*
	*DEL 83-0 CONDUC	TE*	*	*	* *		*	*
	*D IN THE AEDC/V	KF*	*	*	* *		*	*
	*-B 50-INCH HYPE	RS*	*	*	* *		*	* .
	*ONIC WIND TUNNE	L *	*	*	* *		*	*
	*(TESTS DH109 &	OH*	*	*	* *		*	*
	*109B)	*	*	*	* *		*	*
	*	*	*	, ∗	* *		*	*
AEDC	- *RESULTS OF INVE	ST*B75C16E64F16FD3F	R*TO VERIFY ORBI	TER*FORCE	*0.020 / *	ROCKWELL/	*R.H. BURT/ARVIN,	/C*DMS-DR-2491
HWTB	- *IGATIONS ON THE	0+22HG1M52N108N109	N*STATIC STABILI	TY *	* 6.0 *	AEDC -	*ALSPAN	*VOLUME O1
V41B-H0	/*.020-SCALE 0V-1	02 * 1 10N1 1 1R20V27VT 1	O*CHARACTERISTIC	S. *	* *	HYPERSONIC WIN	N*A.C. MANSFIELD/	RI*SEPT., 1983
OA258	*CONFIGURATION S	P *VT11VT12VT13VT14	V*THE LATERAL DI	RE *	* *	D TUNNEL (B)	*.MSFC	*
CR-167,6	59*ACE SHUTTLE VEH	IIC*T15VT16VT17W131	*CTIONAL TRIM L	IMI*	* *		*S. R. HOULIHAN	*
•	*LE ORBITER MODE	L *	*TS IN THE MACH	1 6 *	* *		*G. W. KLUG	*
	*106-0 IN THE US	AF*	*TO 8 REGIME. T	O I*	* *		*-DMS	*
	*/AEDC VKF TUNNE	L *	*NVESTIGATE THE	: <b>H</b> Y*	* *		*	*
	*B (OA258)	*	*PERSONIC STABI	LIT*	* *	1	*	*
•	*	*	*Y-DERIVATIVE A	NOM*	* *		*	*
	*	*	*ALIES ENCOUNTE	RED*	* *	ı	*	*
	*	*	*IN TESTS LA141	& *	* *	•	*	*
	*	*	*LA144, & PROVI	DE *	* *	•	*	*
	*	*	*HIGH-ACCURACY	FO *	* *		*	*
	*	*	*RCE & MOMENT H	IYPE*	* *	1	*	*
	*	*	*RSONIC DATA	*	* *	•	*	*
	*	*	*	*	* *	t	**	*

	/		)			
			WIND TUNNEL TEST / DMS DATA	A PROCESSING		353
TEST ID	* * * REPORT TITLE	* * CONFIGURATION: * TESTED	* * * S * TEST * TYPE OF * PURPOSE * TEST	*MODEL *  F * SCALE* TESTING  *MACH RANGE* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATION: *OR COMMENTS
TB - 1B-H0 258	*IGATIONS ON THE /*.020-SCALE OV-10	0*22HG1M52N108N10 02*110N111R20V27VT **VT11VT12VT13VT1 C*T15VT16VT17W131 *	FR*TO VERIFY ORBITER*FORCE 9N*STATIC STABILITY * 10*CHARACTERISTICS, * 4V*THE LATERAL DIRE * *CTIONAL TRIM LIMI* *TS IN THE MACH 6 * *TO 8 REGIME, TO I* *NVESTIGATE THE HY* *PERSONIC STABILIT* *Y-DERIVATIVE ANOM* *ALIES ENCOUNTERED* *IN TESTS LA141 & * *LA144, & PROVIDE * *HIGH-ACCURACY FO * *RCE & MOMENT HYPE* *RSONIC DATA *	*0.020 / *ROCKWELL/ * 6.0	*R.H. BURT/ARVIN, *ALSPAN IN*A.C. MANSFIELD/I *,MSFC *S. R. HOULIHAN *G. W. KLUG *-DMS * * * * * * * * * * * * * * * * * * *	*VOLUME 02
VTB - 118-H0 1258	*IGATIONS ON THE /*.020-SCALE OV-10	0*22HG1M52N108N109 02*110N111R20V27VT *VT11VT12VT13VT1 C*T15VT16VT17W131 .*	* * * * * * * * * * * * * * * * * * *	* * * * * * * * * * * * * * * * * * *	*R.H. BURT/ARVIN, *ALSPAN IN*A.C. MANSFIELD/I *,MSFC *S. R. HOULIHAN *G. W. KLUG *-DMS * * * * * * * * * * * * * * * * * * *	*VOLUME 03

		WIND TUNNEL TE	ST / DMS DAT	A PROCESSING			354
*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST *	* CONFIGURATION	S * TEST	* TYPE C		* TESTING	* TEST DMS	*PUBLICATIONS
ID * REPORT TITLE	* TESTED	* PURPOSE	* TEST	*MACH RANGE	* AGENCY	<ul> <li>PERSONNEL</li> </ul>	*OR COMMENTS
EDC - *RESULTS OF INVES	T+D75016564646502	EDATO VEDIEV ODE	TTE0+E000E	*0.020 /	*ROCKWELL/	*R.H. BURT/ARVIN	/C*DMS=DD-2401
#TB - *IGATIONS ON THE				* 6.0	*AEDC -	*ALSPAN	*VOLUME 04
41B-HO /*.020-SCALE 0V-10				* 0.0		N*A.C. MANSFIELD/	
4258 *CONFIGURATION SP				*	*D TUNNEL (B)		*
R-167.662*ACE SHUTTLE VEHI				*	*	*S. R. HOULIHAN	*
*LE ORBITER MODEL		*TS IN THE MAC		•	•	*G. W. KLUG	*
*106-0 IN THE USA		*TO 8 REGIME,		•	•	*-DMS	*
*/AEDC VKF TUNNEL		*NVESTIGATE TH		•	*	*	*
*B (0A258)	. *	*PERSONIC STAE		•	•	•	*
+B (UA238)	Ī	*Y-DERIVATIVE			T	<del>-</del>	*
<u>.</u>	Ī.	*ALIES ENCOUNT		-		-	•
I	1	*IN TESTS LA14		•	- -	•	*
Ĭ.	<u>.</u>			<u>.</u>	•		•
* *	<b>.</b>	*LA144, & PRO\		T	<b>.</b>	*	•
	<b>T</b>	*HIGH-ACCURACY *RCE & MOMENT			<b>.</b>	*	*
· •	Ţ		nire+	*	<u>.</u>	- I	<b></b>
<u>*</u>		*RSONIC DATA	<u>.</u>	<b>.</b>	<u>-</u>	Ī.	- -
DC - *RESULTS OF THE S	**************************************	#	**************************************	NC+0 00E /	*ROCKWELL/	*J. COLLINS/RI	*DMS-DR-2492
DC - *RESULTS OF THE S TB - *V ELEVON GAP HEA			* *	*8.0 -	*AEDC -	*S. R. HOULIHAN	*JUNE. 1982
3B-17 /*ING TESTS USING		i e	T.	*8.0		IN*H. C. ZIMMERLE	*
1107 *HE 0.025-SCALE S		ic / -		*8.0	*D TUNNEL (B)		
1107 THE 0.023-3CALE 3			•	*	**	* 543	*
*ER MODEL (94-0)		I	<b>.</b>	ī	*	*	<u>.</u>
*N THE AEDC/VKF H		I	<u>.</u>	•	*	•• •	*
*PERSONIC WIND TU		Ī	Ţ/		* •		•
*NEL B (0H107)	1147		Ţ	•	. T	•	•
*NEC B (UH107)	±	<b>-</b>		•	•	•	· ·
TO - *DECHLIE DE INVE	**************************************	* MATO CONTINUE	**************************************	*0.010 /	*ROCKWELL/	*R.H. BURT,W. CR	UC*UNC*UD*3403
DC - *RESULTS OF INVES TB - *IGATIONS OF THE				* 6.0~	*AEDC -	*BY,J.T. BEST/AE	
				* 0.0	*HYPERSONIC W		*AUGUST. 198
2B-145 /*.010-SCALE OV-10						- · · · · · · · · · · · · · · · · · · ·	
3B-14 /*CONFIGURATION SF		*AL DIRECTION		*	*D TUNNEL (B)		. ⊑ ↑
259 *ACE SHUTTLE VEH		*ABILITY ANOMA		* -	<b>∓</b>	*. NICHOLS/RI	- -
-167,665*LE ORBITER MODEL		*ORIGINALLY E		<b>*</b>	<b>₹</b>	*S. R. HOULIHAN	<b>.</b>
*72-0 IN THE NASA		*NTERED IN TE		*	<b>∓</b>	*G. W. KLUG	<b>.</b>
*AEDC VKF TUNNEL	<b>₽</b> *	*A141,LA144, /	AND O*	<b>*</b>	*	*-DMS	<b>∓</b>
* (OA259)	<b>∓</b>	*A258	*	<b>∓</b>	<del>*</del>	<del>-</del>	*
*	*	*	*	*	*	<b>∓</b>	#

			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			355
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	*     TEST     PURPOSE	*	*MODEL  * SCALE  *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
68 - 28-145 38-14 259 167,66	*IGATIONS OF THE /*.010-SCALE OV-10 /*CONFIGURATION SF *ACE SHUTTLE VEHI 6*LE ORBITER MODEL *72-0 IN THE NASA *AEDC VKF TUNNEL *	(C* - * A/*	O*TIGATIONS OF THE 3*MACH 6 TO 8 LATE *AL DIRECTIONAL S *ABILITY ANOMALIE *ORIGINALLY ENCOU *NTERED IN TESTS *A141,LA144, AND *A258	E * ER* 5T* ES* J * L* O* *	* 6.0- * * * * * *	*AEDC - *HYPERSONIC WIN *D TUNNEL (B) * * * * *	*R.H. BURT,W. CROS *BY,J.T. BEST/AEDO */CALSPAN *R.H. SPANGLER,M.E *R. NICHOLS/RI *S. R. HOULIHAN *G. W. KLUG *-DMS * *C. L. BERTHOLD/RI	*VOLUME O2 *AUGUST, 1983 * * * * * * * * * * * * * * * * * * *
.5HWT - 54 1108	*NG TESTS OF A O. /*O-SCALE SS ORBIT *R ELEVON/ELEVON O*AP MODEL 93-0 IN *THE NASA/ARC 3.5 *FOOT HYPERSONIC *IND TUNNEL (OHIC *)	1* 'E* G* J * 5 * W*	*AND STUB HEATING *DISTRIBUTION * * * * * *		*7.3 - *7.3 *		*S. R. HOULIHAN *H. C. ZIMMERLE	*JUNE, 1982 * * * * * * * *
5HWT - 33 , 1110	*TEST RESULTS FRO *THE NASA/ROCKWEL /*L INTERNATIONAL *PACE SHUTTLE O.C 4*75-SCALE ORBITER *MODELS 56-0/60-0 *AND THE O.O4-SCA *E ORBITER FOREBO *Y MODEL 83-0 CON *UCTED IN THE NAS */ARC 3.5-FOOT HY *ERSONIC WIND TUN *EL (TEST OH110)	- *60-0 S*83-0 1)* 1) * 1) * 1D* 1D* 1D* 1D* 1D*	* *OBTAIN ORBITER F *ATING DATA TO ES *ABLISH MACH NUME *R SENSITIVITY OF *ORBITER IN YAW * * * * * * * * * * * * * * * * *	ST* 3E*	* 0.04 / *5.3 - *7.3	*ARC - *3.5-FOOT HYPER *SONIC WIND TUN		** *DMS-DR-2495 *OCT., 1981 * * * * * * * * * * * * * * * * * * *

								WIND T	UNNEL TE	ST /	DMS D	ATA	PROCES	SSING							356
	*			*				*		*			*MODEL		*		*	COGNIZANT	*	BASI	C
TEST	*	BEBBB		*	CON	FIGURAT		*	TEST	*	TYPE			SCALE	_		*	TEST DMS		_	TIONS
ID	*	REPUR	T TITLE	*		TESTED	·	*	PURPOSE		TES	· I ·	*MACH	RANGE	* AGENO	;Y 	* 	PERSONNEL	*UR	COMM	1EN 15
AEDC									TAIN HEA			RANS			*ROCKWEL	_L/		L. BERTHOLD/			
									R DATA O				* 8.0	-	*AEDC	- MITO 141		R. HOULIHAN		DLUME DV	1982
V41B-1C 0H111	-		ING THE		-		UKEBU		T WOULD	–			*		*HIPERSU			J. BURST	+140	,	1902
CR-167,3					1 63	-0			TERED IN				-		*D IUNNE	L (D)	*	13	*		
OK 107,0			, AND T						TLANTIC				*		*		*		*		
			ALE 83-					*T MAN		*			*		*		*		*		
			N THERM					*	LOTEN	*			*		*		*		*		
			DELS IN					*		*			*		*		*		*		
			VKF TUN					*		*			*		*		*		*		
			SONIC W					*		*			*		*		*		*		
	*D	TUNNE	L(0H111	) *				*		*			*		* .		*		*		
	*		•	*				*		*			*		*		*		*		
AEDC	- *R	ESULTS	OF THE	TR*C	.017	5-SCALE	56-0	*TO 0E	TAIN HEA	T TR*	HEAT-1	RANS	S* 8.0	0-	*ROCKWEL	LL/	*C.	L. BERTHOLD/	'RI*DM	4S-DR-	-2496
HWTB	- *A	NSATLA	NTIC AB	ORT*C	.017	5-SCALE	60-0	*ANSFE	R DATA C	N OR*			* 8.0	0	*AEDC	-	*S.	R. HOULIHAN	*VC	LUME	02
V41B-1C	/*M	ANEUVE	R TEST(	OH *C	.04-	SCALE F	OREBO	*BITER	TTA TA	TUDE *			*		*HYPERSO	ONIC WI	IN*B.	J. BURST	*NC	ν.,	1982
OH111	* 1	11) US	ING THE	0.*0	Y 83	-0		*S THA	T WOULD	BE E*			*		*D TUNNE	EL (B)	*-D!	48	*		
CR-167,3	881+0	175-SC	ALE 56-	0 A*				*NCOUN	ITERED IN	I A T*			*		*		*		*		
	*N	D 60-0	, AND T	HE *				*RANSA	TLANTIC	ABOR*			*		*		*		*		
	*0	.04-SC	ALE 83-	0 T*				*T MAN	IEUVER	*			*		*		*	•	*		
	*H	IIN SKI	N THERM	OCO*				*		*	:		*		*		*		*		
	*U	PLE MO	DELS IN	TH*				*		*			*		*		*		*		
	* E	AEDC "	VKF TUN	NEL*				*		*			*		*		*		*		
			SONIC W					*		*			*		*		*		*		
	*D	TUNNE	L(0H111	) *				*		*			*		*		*		*		
	*			*				*		*			*		*		*	·	*		
AEDC									STAIN HEA			RAN:		_	*ROCKWEI	LL/		L. BERTHOLD		_	
HWTB									R DATA C				* 8.0	0	*AEDC	-		R. HOULIHAN		DLUME	
V41B-1C							OKER						*					J. BURST	*NU	ov.,	1982
OH111 CR-167,3			ING THE		11 83	-0		-	T WOULD				*		*D TUNN!	FF (B)	*-DI	M2	*		
CK-107,3									ITERED IN				*		<b>*</b>		*		-		
			, AND T						TLANTIC	ABUR*			*		<b>*</b>		*		* •		
			ALE 83- N THERM					*T MAN	NEUVER	7			# _		<del>*</del>		*				
			DELS IN					-		7	•		-		-		-		Ť		
			VKF TUN					-		-	•		<b>∓</b>		*		-		*		
			SONIC W	_				<del>-</del>		-			-		•		<b>.</b>		÷		
			30N1C W L(OH111					-			,		<b>-</b>		+		÷		- -		
	+∪ *	IONINE	-(00111	, *			•	-		-			-		-		*		÷		
	-			*				-		*			-		~		~		-		

			:					
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			357
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST ID	* * REPORT TITLE	* CONFIGURATION * TESTED	NS * TEST * PURPOSE	* TYPE OF * TEST			* TEST DMS * PERSONNEL	*PUBLICATIONS *OR COMMENTS
.ARC	- *RESULTS OF SPACE	*102 (PRELIMINA	RY)*RCS JET INTERAC	ΓI∗FORCE	* 0.0125 /	*ROCKWELL/	*J. MARROQUIN/RI	*DMS-DR-2498
PWT	- *SHUTTLE ORBITER	•	*ON EFFECTS	*		*LARC -	*J. J. DAILEDA/R	I *AUGUST, 1983
311	/*MODEL 70-0) LATE		*	*			W*S. R. HOULIHAN	*
611	- *ENTRY RCS YAW JET		*	*		*IND TUNNEL	*J. E. VAUGHN	*
358 A255	/*EFFECTS TESTS IN *THE NASA/LARC UP		*	*		*16-FOOT TRANSO	T*-DW2	*
A256	*WT AND 16-FT. WIN		- -	*	<b></b>	+IAIC IONNEL	. T	*
	556*D TUNNELS (0A255)		*	*	*	*	*	*
	*OA256)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
RC	- *RESULTS OF TESTS	*B69C14DT1E54F1	4FD*MEASURE TURBULE	NC*PRESSURE	*0.36 /	*ROCKWELL/	*T.J. DZIUBALA,R	.R*DMS-DR-2499
IOSWT	- *USING A O.36-SCAL				*0.07 -	*ARC -	*. BURROWS, J. MARI	RO+AUGUST, 1981
173	• • •		18V∗FÜSELAGE USING Þ	<b>ŀF</b> *	*0.26	*40-F00T BY 80-	-*QUIN/RI	*
A 164	*THE SSV ORBITER		*A; DETERMINE RN/				*S. R. HOULIHAN	*
R-160,	336+101 IN THE NASA/		*DEPENDENCE ON OF		*	*WIND TUNNEL	*G. R. LUTZ	*
	*MES RESEARCH CENT		*WAKE CHARACTERIS		*	*	*-DMS	*
	*ER 40X80-FOOT SUE		*TICS, AND ABILTI		*	*	*	*
	*SONIC WIND TUNNEL *(OA164)	- <del>*</del>	*OF TAILCONE/SCOO		*	<b>∓</b>	*	<b>∓</b>
	* (UA 104)		*S TO REDUCE TURE *LENCE: AND TO OBT		*	*	<b>7</b> ★	<b>-</b> ±
	*	*	*IN FLIGHT TEST		*	*	*	*
	*	*	*OBE DATA W/WO A		*	*	*	*
	*	*	*AILCONE	*	*	*	*	*
	*	*	*	*	*	*	*	*
RC	- *PHASE II SCREENIN	N*115-0 AFRSI MA	TER*TO CONTINUE THE	S*PRESSURE	*0.85 -	*ROCKWELL/	*J. G. R. COLLET	TE*DMS-DR-2500
2TWT	- *G TEST OF AFRSI N	A*IAL PANELS	*CREENING PROCESS	5 *	*1.1	*ARC -	*/RI	*DEC., 1981
67-1	/*ATERIAL USING MOD	)*	*INITIATED ON OS	30*	*	*2-FOOT BY 2-FO	D*S. R. HOULIHAN	*
S301	*EL 115-0 IN THE A		*O BY INVESTIGAT			*OT TRANSONIC \		*
R-160,	348 MES RESEARCH CENT		*G THE RELATIVE D		*	*IND TUNNEL	*-DMS	*
	*ER 2X2-FOOT TRANS		*RABILITY OF VAR		*	*	*	*
	*ONIC WIND TUNNEL	*	*US CONFIGURATION	<b>15</b> *	*	*	*	*
	*(DS3O1)	*	*OF AFRSI	*	*	*	*	*

.

		WIND	TUNNEL TEST	/	DMS DATA	PROCE	SSING					358
* *		*		*		*MODE	 L	 *	*	COGNIZANT	* BASIC	- <i></i> -
TEST * *	CONFIGURATIONS	*	TEST	*	TYPE OF	*	SCALE	* TESTING	*	TEST DMS	*PUBLICAT	TIONS
ID * REPORT TITLE *		* .	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR COMME	ENTS
ARC - *SPACE SHUTTLE AFR*		*TO 9	SUBJECT ADVA	NC*I	DDESSIEDE	* O.7	6-	*ROCKWELL/	*.1	.G.R. COLLETT	re/R+DMS-DR-2	2501
11TWT - *SI OMS PODS/JOINT*			FLEXIBLE REL			* 0.8	-	*ARC -	_	.d.n. oolle.		1982
501-1 /*S DEVELOPMENT TES*			SURFACE INS			* 0.0		*11-FOOT TRAN			*	
OS304A *T USING MODEL 116*			DN(AFRSI) SE			*		*NIC WIND TUN			<b>\</b> *	
CR-167.373*-D SPECIMENS & MO*			NS TO AN EN			*		*L (UNITARY)			*	
*DEL 96-0 TEST FIX*			ENT SIMULAT			*		*		DMS	*	
*TURE IN THE AMES *			FLOW CHARAC			*		*	*		*	
*RESEARCH CENTER 1*			STICS ENCOU			*		*	*		*	-
*1X11-FOOT TRANSON*			AT THE OMS			*		*	*		*	
*IC WIND TUNNEL (O*			OF THE SSV (			*		*	*		*	
*S304A) *			ASCENT. &			*		*	*		*	
*			LUATE THE AL			*		*	*		*	
* *			DINTS IN TH			*		*	*		*	
* *		*ENV	IRONMENT	*		*		*	*		*	
* *		*		*		*		*	*		*	
ARC - *SPACE SHUTTLE AFR*		*T0	SUBJECT ADV	ANC*	PRESSURE	* 1.	8	*ROCKWELL/	ل∗	.G.R. COLLET	TE/R*DMS-DR-2	2502
97SWT - *SI OMS PODS/JOINT*		*ED	FLEXIBLE RE	JSA*		*		*ARC -	* I		*AUGUST,	198
501-1 /*S DEVELOPMENT TES*		*BLE	SURFACE IN	SUL*		*		*9-FOOT BY 7-	F0*S	. R. HOULIHA	N *	
OS304B *T USING MODEL 116*		*ATI	ON (AFRSI) !	SPE*		*		*OT SUPERSONI	C *G	. R. LUTZ	*	
CR-167,378*-0 SPECIMENS AND *		*CIM	ENS TO AN EI	*IV		*		*WIND TUNNEL	(U*-	DMS	*	
*MODEL 81-0 TEST F*		*RON	MENT SIMULA	TIN*		*		*NITARY)	*		*	
*IXTURE IN THE AME*		*G T	HE FLOW CHAI	RAC*		* .		*	*		*	
*S RESEARCH CENTER*		*TER	ISTICS ENCO	UNT*		*		*	*		*	
*9X7-FOOT SUPERSON*		*ERE	D AT THE OM:	S P*		*		*	*		*	
*IC WIND TUNNEL (O*		*ODS	OF THE SSV	DU*		*		*	*	•	*	
*S304B) *		*RIN	G ASCENT &	TO *		*		*	*		*	
* *		*EVA	LUATE THE A	FRS*		*		*	*		*	
* *		*I J	OINTS IN TH	IS *		*		*	*		*	
* *		*ENV	IRONMENT	*		*		*	· *		*	
* *		*		*		*		*	*		*	

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	IND TUNNEL TEST / DMS DATA PROCESSING	359 
* * * CONFIGURATIONS ID * REPORT TITLE * TESTED	* ************************************	COGNIZANT * BASIC TEST DMS *PUBLICATIONS PERSONNEL *OR COMMENTS
T - *ED LOADS ORBITER *20C ,6,7,9/*TEST (CLOT) IN TH*20D (NOT TESTED)  3A *E NASA/LARC 8-FOO*  3B *T TPT USING THREE*  167,363*CONFIGURATION 20 *  *TPS FLOW TEST PA *  *NELS (OS53A/B) *  *  *  *  *  *  *  *  *  *  *  *  *	** TILES REMAIN AT*	R. LUTZ *  *  *  *  *  *  *  *  *  *  *  *  *
WT - *SI LARGE-SCALE DE* -1	## TO SUBJECT LARGE-*PRESSURE * 1.8	R. LUTZ *
*		*

				WIND	TUNNEL TEST	/	DMS DATA	PROCES	SSING						360
	*	*		*		*		*MODE1		*	*	COGNIZANT	* B		
TEST			CONFIGURATIONS	*	TEST		TYPE OF			* TESTING	*	TEST DMS	*PUBL		
ID	* REPORT TITL	.E *	TESTED	*	PURPOSE	*	TEST	*MACH	RANGE	* AGENCY	*	PERSONNEL	*OR C	OMME	NTS
AEDC	- *RESULTS OF AS				DETERMINE THE		RESSURE	* 1.19	5	*ROCKWELL/		G. MEYER/ARVI			
	- *AERODYNAMIC L				NSONIC FLOW E			*		*AEDC -		LSPAN	*AUGU	IST,	1982
TF-551	/*ING TESTS OF				TS ON THE TPS			*				R. BURROWS/RI	*		
0546A-G					ES, DOOR & CA			*				R. HOULIHAN	*		
CR-167,	376*TION SYSTEM (				THERMAL BARR			*		*NNEL (PWT-1			*		
	*IN & AROUND T				, FOAM ON THE			*		*	*-DI	MS	<b>∓</b>		
	*ORBITER/ET UN				ILICAL, PRESS			*		# 	*		*		
	*CAL DOOR & CA				SEAL, CLOSEOU			*		*	<b>.</b>				
	*, USING MODEL				TAIN, & DOOR			*		*					
	*8-0 & 1090 IN		,	*FLU	W RESTRICTOR	*		Ţ.					Ţ		
	*AEDC 16-T PRO *SION WIND TUN			<b>-</b>		<u>.</u>		Ī		<u>.</u>			•		
	*(OS46A-G)	AINEL *		Ţ.		Ţ.		Ţ.					*		
	+(0340A G)	<i>-</i>		•		- T		*		*	*		*		
ARC	- *GAP FILLER RE	HISE *				* 0	RESSURE	*		*ROCKWELL/	*1	P. LEBLANC/RO	CK*DMS-	-DR-2	506
11TWT	- *TESTS OF FULL			*		*	RESSORE	*		*ARC -	*WE		*DEC.		1982
	31/*LE SPACE SHUT			*		*		*				R. HOULIHAN	*		,,,,,
	- *ORBITER TILE			*		*		*		*NIC WIND TO			*		
	2.3*Y MODELS IN 1			*		*		*		*L (UNITARY)			*		
	384*ASA/ARC 9X7-F			*		*		*		*9-FOOT BY 7			*		
	*AND 11-FOOT L			*		*		*		*OT SUPERSON			*		
•	*RY PLAN WIND			*		*		*		*WIND TUNNEL	_		*		
	*EL (0560,0561	A.OS*		*		*		*		*NITARY)	*		*		
	*61B,0562,0562			*		*		*		*	*		*		
	*ND 0563)	*		*		*		*		*	*		*		
	*	*		*		. *		*		*	*		*		
ARC	- *RESULTS OF IN	<b>VEST*O</b> F	BITER MODEL 10	6+T0	CHECK THE RUD	D * F	ORCE	*0.02	/	*ROCKWELL/		H. SPANGLER	'RI*DMS-	-DR-2	507
11TWT	- *IGATIONS OF 1	THE \$*-0	)	*ER	AND AILERON E	F*		* 0		*ARC -		P. CLARK/RI	*MAR	CH,	1984
510-1	/*PACE SHUTTLE	ORBI*		*FEC	TIVENESS AND	<b>T</b> *		*6 2	•			R. HOULIHAN	*		
97SWT	- *TER ONE-QUART				ORBITER LATER			*		*NIC WIND TO			*		
MA33A/B					IRECTIONAL HY			*		*L (UNITARY)		MS	*		
CR-167,	683∗ANOMALY IN TH				ESIS, AND TO			*		*9-FOOT BY			*		
	*SA/AMES RESEA				IDE INFORMATI	-		*		*OT SUPERSON			*		
	*CENTER 11X11-				O AID IN UNDE			*		*WIND TUNNE!	L (U*		*		
	*AND 9X7-FOOT			_	NDING STS 1-3			*		*NITARY)	*		*		
	*D TUNNELS US				-QUARTER-HERT	Z*		*		*	*		*		
1	*.02-SCALE MOD			*ANO	MALY	*		*		*	*		*		
=	*06-0 (MA33A/E	3) *		*		*		*		*	*		*		
	*	*		*		*		*		*	*		*		

			y."					
			WIND TUNNEL TEST	/ DMS DATA	PROCESSING			361
TEST ID	* * * REPORT TITLE	* * CONFIGURATIONS * TESTED	* * TEST * PURPOSE	*     * TYPE OF     * TEST	*MODEL * SCALE *MACH RANGE	* E* TESTING E* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
11TWT 548-1 97SWT DS306A/B	*SPACE SHUTTLE AFI ************************************	[*FIXTURE 81-0 5* 4* 5* * * * *	*TO EVALUATE DESI *N/ENGINEERING CO *CEPTS FOR APPLIC *TION AND REPAIR *F THE ADVANCED F *EXIBLE REUSABLE *URFACE INSULATIO *(AFRSI) BLANKET *MATERIAL ON SPAC *SHUTTLE ORBITER *(OV103) AND TO S *(OV103) AND TO S *ERTIFICATION PRO *RAM	DN* CA* O* C* C* C* C* C* C* C* C* C*	*0.08 - *1.8 * * * * * * * * * * *	*ARC -	*-DMS  *  *	
11TWT 549-1 97SWT Dago7a/B	* - *SPACE SHUTTLE FR: - *I-12 TPS TILE VE: /*TING TEST IN THE - *NASA/AMES RESEAR: *H CENTER 11X11-FG 64*OT AND 9X7-F0OT \ *IND TUNNELS (OA3' *A/B) * * * *	N*-12 TILES  * C* I* I*	* *TO OBTAIN VENTIN *CHARACTERISTICS *AND INTERNAL PRE *SURES OF FIBROUS *REINFORCED COMPO *ITE INSULATION ( *RCI-12) TPS TILE *EXPOSED TO PRESS *URE GRADIENTS AS *OCIATED WITH AER *DYNAMIC SHOCKS D *RING SS ASCENT *	* 5 * 5 * 6 * 7 * 7 * 7 * 7 * 7 * 7 * 7 * 7 * 7 * 7	* .78- * 1.80 * * * * * * * * * * * * * * * * * * *	*ARC -	*-DMS * *	
11TWT - 548-1 5309A	**SPACE SHUTTLE AFF  **SI FULL-SCALE CRI /*DIBILITY TEST IN  *THE NASA/AMES RES 51*EARCH CENTER 11X  *1-FOOT WIND TUNNI *L USING MODEL 124 *-O INSTALLED IN 1 *HE 96-O TEST FIXT *URE (OS309A) *	* * \$*  *  *	*TO DEMONSTRATE B *SIC AFRSI FLEXIB *E BLANKET CAPABI *ITY IN AN EXPANS *ON/RECOMPRESSION *SHOCK ENVIRONMEN * * *	L*  L* 	* 0.80- * 0.88 * * * * *	*ARC - *11-FOOT TRANSO *NIC WIND TUNNE	*B.A. MARSHALL/RI *B.A. MARSHALL/RI *R.B. KINGSLAND/RI *S. R. HOULIHAN *G. R. LUTZ *-DMS * * * *	

				NIT GNIM	NEL TEST	/ DM	IS DATA	PROCES	SING						362
	*	*		*		*		*MODEL	. <b></b> -	*		 *	COGNIZANT	* BAS	SIC
TEST			CONFIGURATIONS		TEST		YPE OF			* TESTI			TEST DMS	*PUBLIC	
ID	* REPORT TI	TLE *	TESTED	* Pt	IRPOSE	*	TEST	*MACH	RANGE	* AGENO	Y	*	PERSONNEL	*OR COM	MENTS
ARC	- *RESULTS OF	COLD P+7	5-0TS	*TO DETE	RMINE THE	*PRE	SSURE	*0.010	) /	*ROCKWEL	.L/	*R. +	. SPANGLER.	J.*DMS-DR	R-2511
11TWT	- *LUME TESTS	OF THE*		*EFFECTS	OF GASEO	U*		* 0.6	-	*ARC	-	*G. F	R. COLLETTE/	₹ *VOLUME	E 01
561-1	/*0.010-SCALE	MODE *		*S AND S	OLID PLUM	E*		* 1.4		*11-F00T	TRANSO	* I		*OCT.,	1983
IA300	*L (75-0TS)	IN THE*		*S ON TH	E FOREBOD	Y*		*		*NIC WIN	ID TUNNE	*S. F	R. HOULIHAN	*	
CR-167,	669 * NASA/AMES F	RESEAR *		*PRESSUE	E DISTRIB	*		*		*L (UNI)	ARY)	∗Β. υ	J. BURST	*	
	*CH CENTER	11X11-F*		*UTION (	F THE SPA	C*		*		*		+-DMS	S	*	
	*OOT WIND TO	JNNEL (*		*E SHUTT	LE INTEGR	A *		*		*		*		*	
	*IA300)	*		*TED VEH	IICLE	*		*		*		*		*	
	*	*		*		*		*		*		*	•	*	
ARC	- *RESULTS OF	COLD P*7	5-OTS	*TO DETE	RMINE THE	*PRE	SSURE	*0.010	) /	*ROCKWEL	L/	*R. H	H. SPANGLER,	J. *DMS-DF	2-2511
11TWT	- *LUME TESTS	OF THE*		*EFFECTS	OF GASEO	U*		* 0.6	- '	*ARC	-	*G. F	R. COLLETTE/	R *VOLUME	02
561-1	/+0.010-SCALE	MODE *		*S AND S	OLID PLUM	E*		* 1.4		*11-F001	TRANSO	* I		*OCT.,	1983
OOEAI	*L (75-0TS)	IN THE*		*S ON TH	IE FOREBOD	Y *		*		*NIC WIN	ID TUNNE	*S. F	R. HOULIHAN	*	
CR-167,	670*NASA/AMES	RESEAR *		*PRESSU	RE DISTRIB	*		*		*L (UNIT	TARY)	∗Β. ι	J. BURST	*	
	*CH CENTER	11X11-F*		*UTION (	OF THE SPA	C*		*		*		*-DMS	5	*	
	*OOT WIND TO	JNNEL (*		*E SHUT?	LE INTEGR	<b>A</b> *		*		*		*		*	
	*IA300)	*		*TED VEH	HICLE	*		*		*		*		*	
	*	*		*		*		*		*		*		*	
ARC	- *RESULTS OF	COLD P*7	5-OTS	*TO DETI	ERMINE THE	*PRI	SSURE	*0.010	) /	*ROCKWE!	L/	*R. F	H. SPANGLER,	J. *DMS-DF	R-2511
11TWT	- *LUME TESTS	OF THE*		*EFFECTS	OF GASEO	U*		* 0.6	3 -	*ARC			R. COLLETTE/		
561-1	/+0.010-SCALE	MODE *		*S AND S	OLID PLUM	E*		* 1.4	1					*OCT.,	
1A300	*L (75-0TS)	IN THE*			IE FOREBOD			*		*NIC WIN	ND TUNNE	*S. 'F	R. HOULIHAN	*	
CR-167.	671*NASA/AMES	RESEAR *		*PRESSU	RE DISTRIB	*		*		*L (UNI)	TARY)	*B. u	J. BURST	*	
•	*CH CENTER	11X11-F*		*UTION (	F THE SPA	C*	•	*		*	•	* - DMS	5	*	
	*OOT WIND TO	JNNEL (*		*E SHUT	TLE INTEGR	A*		*		*		*		*	
	*IA300)	*		*TED VE		*		*		*		*		*	
	*	*		*		*		*		*		*		*	
ARC	- *BOUNDRY LAY	/ER TES*1	22-0	*TO 08T	AIN DATA F	O*PRI	ESSURE	* 0.6	3-	*ROCKWEI	L/	*B.	A. MARSHALL,	R. *DMS~DI	R-2512
22TWT	- *TS OF THE	SPACE S*			IN DETERMI			* 0.9	9				KINGSFIELD/R		
542-1	/*HUTTLE AFR				SKIN FRI			*					R. HOULIHAN	*	
0A308	*RIAL IN THE				RAG DUE TO			*		*OT TRAN				*	
CR-167.	667*AMES RESEAR				MPLEMENTA			*		*IND TU		* - DMS		*	
	*TER 2X2-F00				THE SPACE			*		*		*	-	*	
	*SONIC WIND				E VEHICLE	-		*		*		*		*	
	*(0A308)	*		*		*		*		*		*		*	
	*	*		*		*		*		*		*		*	

				WIND TUNNEL TEST	/ DMS DATA	PROCESSING			363
TEST ID	* * * REPORT	* * TITLE *	CONFIGURATIONS TESTED	*  * TEST  * PURPOSE	* * TYPE OF * TEST	*MODEL  * SCALE *MACH RANGE		* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
oc	- *SPACE SH	UTTLE AFR+	MODEL 129-0	*TO EVALUATE AFRS	I*PRESSURE	* 0-	*ROCKWELL/	*B. A. MARSHALL/RI	*DMS-DR-2513
T16T	*SI GAP F	IX TEST O*	•	*JOINT GAPS ON A	*	*.74 0	*AEDC -	*R. B. KINGSLAND/F	
345 313	/*S313 IN	TRANSONI*		*PANEL TO WHICH A *RSI WAS APPLIED		*	*TRANSONIC PROF	P*I J*S. R. HOULIHAN	*
	78*C PROPUL			*N ACCORDANCE TO		*	*NNEL (PWT-16T)		*
, -		SING MOD *		*V 099 OMS POD SP		*	*	*-DMS	*
		INSTALLE*		*CS, & TO DETERMI		*	*	*	*
		MODEL 96* FIXTURE *		*E THE PERFORMANC *OF FIVE JOINT-ST		*	*	*	*
	*	*		*ABILIZER DESIGNS		*	*	*	*
	*	*		*UNDER ASCENT LOA	D*	*	*	*	*
		*		*ING CONDITIONS	*	*	*	*	*
	* *RFSULTS (	OF THE OR*I	LAUNCH VEHICLE W	.¥ I∗WING LOAD RELIEF	* *FDPCE	* 0.004 /	* *MSEC /	*R.C.ARMSTRONG/MSF	* *NMS-NR-2514
				I*INVESTIGATIONS	*	* 0.60-	*MSFC -	*C	*JULY, 1984
	/*EVON LOAD		RINGS	*	*	* 1.46		I*D. E. POUCHER	*
1		T IN THE *		*	*	*	*IC WIND TUNNEL		*
67,6	37*NASA/MSF	G 14-INCH* WIND TU *	•	*	*	*	*	*-DMS	*
		A 0.004-S*		*	*	*	*	*	*
		EL (74-0T*		*	*	*	*	*	*
		SHUTTLE *		*	*	*	*	*	*
		ED AEHICF+		*	*	*	*	*	*
	*E (FA301	) * *		*	*	* .	*	*	*
	*POST-TES	T DATA RE*I	MODEL 125-0. AFR	S*EXPOSE THE AFRSI	*PRESSURE	*1.0 /	*ROCKWELL/	*R.B.KINGSLAND, B.	*DMS-DR-2515
WT .	*PORT FOR	THE SPAC*	I BONDED TO SUPP	O*TO SIMULATED ASC		* 0.55-	*ARC -	*A.MARSHALL/ROCKWE	
	/*E SHUTTLE			*NT AIRLOADS ENVI		* 0.88	*11-FOOT TRANSC		*
	5 *ALE AFRS: 84*E OF ENV:			*ONMENT AND SUPPO *T AFRSI CERTIFIC		*	*NIC WIND TUNNE *L (UNITARY)	*D. E. POUCHER *J. L. GLYNN	*
.0,,0		305-1 TO *		*TION	*	*	*	*-DMS	*
	*5) IN TH	E NASA/A *		*	*	*	*	*	*
		ARCH CENT*		*	*	*	*	*	*
	*ER 11X11· *D TUNNEL	-FOOT WIN*		*	*	*	*	*	*
	* I OMACE	*		*	*	*	*	*	*

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				WIND T	UNNEL TEST	/ 1	DMS DATA	PROCES	SING				36
TEST ID	* * * REPORT TITLE	*	CONFIGURATIONS TESTED	* * *	TEST PURPOSE	*	TYPE OF TEST	*MODEL * *MACH	SCALE:		* * *	COGNIZANT TEST DMS PERSONNEL	* BASIC *PUBLICATION *OR COMMENTS
DS311	- *SPACE SHUTTLE A - *SI FULL-SCALE AI /*LICATION DESIGN *SSUES TEST OS31 688*IN THE AMES RES *RCH CENTER (ARC *11X11-FT WIND TO *NEL USING MODEL *27-0 INSTALLED *THE 96-0 TEST F *XTURE	PP*I I*R 1 * EA* ) * JN* 1*	BONDED TO SUPPO T PLATE	*SIST *OF AF *ATION *THE [		(ON+ _L * _LND*	RESSURE	*1.0 * 0.55 * 0.88 * * * *	- :	*ROCKWELL/ *ARC - *11-FOOT TRANS *NIC WIND TUNN *L (UNITARY) * * * * *	*KWE O*D.	LL E. POUCHER L. GLYNN	DC*DMS-DR-2516 *AUGUST, 198 * * * * * * * * * * * * * * * *
-	* * * * * * * * * * * * * * * * * * *	RO*E F*O ME*O ER*T	LS FORM-FITTED O ER A TWO-DIMENSI NAL MODEL OF AN MS POD CROSS-SEC	*S OF *ON ON *NG ST	AFRSI DAMA	AGE*	RESSURE	* *0.33 * 1.8 * 2.5 * * *	-	* *ROCKWELL/ *ROCKWELL/ *ARC - *9-FOOT BY 7-F *OT SUPERSONIC *WIND TUNNEL ( *NITARY) * * *	*B.K O*ERT *D.	(INGSLAND,C.L HOLD/ROCKWEL E. POUCHER L. GLYNN	· ·
NRLAD LSWT 838 0A309 CR-167,6	* - *RESULTS OF TEST - *OF ADVANCED FLE /*BLE REUSABLE SU *ACE INSULATION 692*RTEX AND FLOW E *IRONMENTS IN TH *NORTH AMERICAN *RODYNAMICS LABO *TORY LOW SPEED *ND TUNNEL USING *.0405-SCALE SPA *SHUTTLE ORBITER *16-0 (TEST 0A30	X	ORBITER	*AND	RMINE VORT FLOW ENVIR ON AFRSI		ORCE	* * * * * * * * * * * * * * * * * * *	-	* *ROCKWELL/ *NRLAD - *LOW SPEED WIN *TUNNEL * * * * * * * * * * * * * * * * * * *	*.NI ID+D.	CHOLS/ROCKWE E. POUCHER L. GLYNN	** ** * * * * * * * * * * * * * * * *

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			WIND TUNNEL	WORK IN PROCESS TEST / DMS DATA	A PROCESSIN	G	_	365
TEST ID	* * * REPORT	*			*MODEL F * SCA *MACH RAN	* LE* TESTING GE* AGENCY	* COGNIZANT * TEST DMS * PERSONNEL	* BASIC *PUBLICATIONS *OR COMMENTS
LARC CF4 220-237 20HT6 456 LA53 LA54	- * - * /* - * /*	*     *     *     *     *     *	* * * *	*FORCE * * * * *	*5.8 - *6.0 * *	*LARC / *LARC - *FREON TUNNEL *20-INCH HYPEF *ONIC TUNNEL *ACH 6)	RS*	*DMS-DR-2213 * * * * * *
LARC V/STOL 114 OA155	- *IC STUDIE: /*AN 0.030 *BITER CON *ATION 140 *L (47-0) *ASA/LARC	SCALE OR* FIGUR- * A/B MODE* IN THE N*	*E DISTRIBUT  *AND FORCES  *MENTS FOR  *ORBITER IN  *PROACH AND  *G CONFIGURA	TIONS *FORCE AND MO* THE * THE AP* LANDIN*	* 0.030 ·		*J.J.DAILEDA/RI *J.MARROQUIN/RI IT*S. R. HOULIHAN W*H. C. ZIMMERLE *-DMS *	* *DMS-DR-2237 * * * * * *
	*RANSITION *RESEARCH \ *NEL (OA15		*WITH AND WI *THE INFLUEN *A GROUND PL *ERTICAL TAI *S AND ELEVO *BODY FLAP, *DDER HINGE *S WERE ALSO	ICE OF * ANE. V* L LOAD* IN, * AND RU* MOMENT*	* * * * *	* * * * * *	* * * * * * *	* * * * * *
LARC 22HT 439 LA68	* - * - * /*	* * * * *	*NED. *	* * TS; BA*FORCE	* * 19.1 - *20.36 *	* *LARC / *LARC - *22-INCH HELIU *TUNNEL	* * *BILL WOODS/LARC *J. E. VAUGHN UM*-DMS *	* * *DMS-DR-2256 * *
LARC 8TPT 715 8TPT 776 LAGOB LAGOC	- * - * /* - * * *	* * * * * * *	*DETERMINE E *OF SEVERAL *FILLET CONF *IONS * *		* *0.3 - *1.2 * * * * * * * * * * *	*LARC / *LARC - *8-FOOT TRANSO *IC PRESSURE 1 *NNEL *8-FOOT TRANSO *IC PRESSURE 1 *NNEL *	TU* * DN*	* DMS-DR-2260 * * * * * * * *

*					WIND	TUNNEL			PROCES DMS DA		PROCES	SING							366
	*		*		*			*			*MODEL	<i></i>	*			*	COGNIZANT	*	BASIC
TEST	*		*	CONFIGURATIONS	*	TES	T	*	TYPE	OF	*	SCALE	*	TESTIN	≀G	*	TEST DMS	*PU	BLICATIONS
ID	*	REPORT TITLE	*	TESTED	*	PURPO	SE	*	TEST	Г 	*MACH	RANGE	*	AGENCY	, . <b></b> .	*	PERSONNEL	*OR	COMMENTS
RC	- *		*		*TO	VERIFY	INTEGE	21*5	TRUCT:	-DYN	*1.55	_	*R0	CKWELL	,	*R.9	S. CROWDER/RI	* D.M	IS-DR-2287
7SWT	- *		*			OF THE					*2.5		*AR		_		R. HOULIHAN	*	
166-1	/*		*			I MATER	_				*				3Y 7-F0		C. ZIMMERLE	*	
1513	*		*			ANEL FL					*		*0T	SUPER	SONIC	* - DN	MS	*	
	*		*		*ENV	IRONMEN	T	*			*		*WI	אטד מאו	INEL (	U*		*	
	*		*		*			*			*		*NI	TARY)		*		*	
	*		*		*			*			*		*			*		*	
ISWC	- *		*		*			* [	ORCE		*.0040	) /			/		E. VAUGHN	*DN	IS-DR-2291
3A	- *		*		*			*			*			SWC	-		J. BURST	*	
1275	/*		*		*			*			*		*TU	JNNEL 8	3 A	* - D!	MS	*	
.A79	*		*		*			*			*		*			*		*	
	*		*		*			*			*		*			*		*	
RC	- *		*		*			* 5	STRUCT	-DYN	*			CKWELL	-/	*		*DN	IS-DR-2339
2TWT	- ,*		*		*			*			*		*AR		-	*		*	
167-1	/*		*		*			*			*		_	-FOOT E				*	
3532	*		*		*			*			*			TRANS		W*		*	
	*		*		*			*			*			ND TUNN	NE L	*		*	
4	*		*		*			*			*		*		,	*		*	
.ARC	- *		*		*			*1	ORCE		*			ARC	/	*		* U k	IS-DR-2362
STPT	- *		**		*			*			*			ARC	- rnaaco	# 61+		-	
'64 .A92	/*		*		*			*			*		_	-FOOT 1 C PRESS				-	
.A92	-		<b>.</b>		* _			•			<b>.</b>			J PRESS	SURE I	U÷		- T	
			Ţ		Ĩ.			Ī			Ţ		*	NE L		-		*	
.ARC	- *		·		-			- T	FORCE		*			ARC	/	*.1	E. VAUGHN	*DI	4S-DR-2379
TPT	- *		-		-			- TI	UKCE		÷			ARC	<u>'</u>		J. BURST	*	13 DK 2075
776	/*		*		*			*			*			-FOOT 1	TDANSO			*	
A 106	· *		*		*			*			*		_	C PRESS				*	
	*		*		*			*			*			VEL	JUNE 1	*		*	
	*		*		*			*			*		*			*		*	
ARC	- *		*		*			*	PRESSU	RE	*		*L4	ARC	/	*J.	E. VAUGHN	*DI	4S-DR-2383
FHT	- *		*		*			*		_	*						L. GLYNN	*	
30	/*		*		*			*			*			DNTINU				*	
.A93	*		*		*			*			*			HYPERS	_			*	
	*		*		*			*			*			NNEL		*		*	
	*		*		*			*			*		*			*		*	
_TV	- *		*		*			*	FORCE		*		*L/	ARC	/	*J.	E. VAUGHN	*DI	MS-DR-2394
ISWT	- *		*		*			*			*		*L1	TV	-	*B.	J. BURST	*	
511	/*		*		*			*			*			IGH SPI	EED WI	N*-D	MS	*	
LA 109	*		*		*			*			*		*D	TUNNE	L,	*		*	
	*		*		*			*			*		*			*		*	

# WORK IN PROCESS WIND TUNNEL TEST / DMS DATA PROCESSING

TEST 1D 7 1D 7 1D 7 1D 7 1D 7 1D 7 1D 7 1D	* * * * * * * * * * * * * * * * * * * *		SURATIONS * STED *  * * * * *	TEST PURPOSE	* TYPE OF * TEST *FORCE		* E* TESTING E* AGENCY  *LARC / *LARC -	* TEST		* BASIC *PUBLICATIONS *DR COMMENTS *DMS-DR-2411
8TPT - 3 804 / 2 LA116 - 3 LARC - 3 8TPT - 3 813 / 3	* * * * * * * * * * * * * * * * * * * *	* * * * *	* * * *		*FORCE	*				*DMS-DR-2411
8TPT - 3 804 / 2 LA116 - 3 LARC - 3 8TPT - 3 813 / 3	* * * * * * * * * * * * * * * * * * * *	* * * *	* * * *		*FURCE	*				*UM3-UK-2411
BO4 /* LA116 **  LARC - ** 8TPT - ** 813 /*	* * * * * * * * * * * * * * * * * * * *	* * * *	* *		<u> </u>			t F	ZUDST	**
LA116 - 3	* * *	*	*		*	*	*8-FOOT TRANSO	_	וכאטנ	*
LARC - 3 BTPT - 3 B13 /	* * * *	*	*			*	*IC PRESSURE T			*
BTPT - 7	* *	*			*	*	*NNEL	*		*
BTPT - 7	*		*		*	*	*	*		*
BTPT - 7	*	*	*		*FORCE	*	*LARC /	*J. E. \	<b>VAUGHN</b>	*DMS-DR-2425
813 /		*			*	*	*LARC -	*B. J. E		*
	<b>'</b> *	*	*		*	*	*8-FOOT TRANSO			*
	*	*	*		*	*	*IC PRESSURE T			*
	*	*	*		*	*	*NNEL	*		*
*	*	*	*		*	*	*	*		*
LARC -	*	*	*		*FORCE	*	*LARC /	*J. E. \	<b>VAUGHN</b>	*DMS-DR-2441
LTPT -	*	*	*		*	*	*LARC -	*B. J. E	BURST	*
255 /	*	*	*		*	*	*LOW-TURBULENC	E*-DMS		*
LA127 ;	*	*			*	*	*PRESSURE TUNN			*
	*	*			*	*	*EL	*		*
	*	*	*		*	*	*	*		*
LTV - :	*	*	*		*FORCE	*	*LARC /	*J. E. V	VAUGHN	*DMS-DR-2442
HSWT - :	*	*	*		*	*	*LTV -	*B. J. E		*
646 /	*	*	*		*	*	*HIGH SPEED WI			*
LA128	*	*	*		*	*	*D TUNNEL	*		*
LATE	*	*	*		*	*	*	*		*
LARC -	*	*	*		*FORCE	*	*LARC /	*J. E. \	VALIGHN	*DMS-DR-2446
UPWT -	*	*	*		*	*	*LARC -	*B. J. E		*
1270 /·		*	*		*	*	*UNITARY PLAN		,,,,,,	*
LA 122	*	*	*		*	*	*IND TUNNEL	*		*
	*	*	*		*	*	*	*		*
ARC -	*	*	*		*PRESSURE	*	*ROCKWELL/	*S. R. H	HOULTHAN	*DMS-DR-2447
11TWT - 1	*	*	*		*	*	*ARC -	*B. J. E		*
436-2 /	*	*	*		*	*	*11-FOOT TRANS		,	*
OS52 '	*		*		*	*	*NIC WIND TUNN			*
,	*	*	<u>.</u>		w.	*	*L (UNITARY)	*		*
	•	*	.r		*	*	* (ONTIANT)	*		*
MSFC -	•	*	#חבז י	ERMINE CAUSE	A*EODCE	* 0.004 /	*MSFC /	*RTII RI	SADDOCK /I M	#S*DMS-DR-2460
14TWT -	*	*		AERO FIX TO		*0.60-	*MSFC -	*C-HUNTS		*
655 /	<b>∓</b>			NATE ORBITER		*1.25	*14-INCH TRISO			• •
FA27	▼ . •			INATE UKBITER		* 1.40	*IC WIND TUNNE			*
rm4/ '	*	•	*0[[	TING MOMEN!	<del>-</del>	•	+TO MIND INNINE	*-DMS	AUGHIN	•
•	•	-	<b>*</b>		- -	-	T	*-DM2		<del>.</del>

				VORK IN PROCESS	A PROCESSING			368
	*	*	*	*	*MODEL	*	* COGNIZANT	* BASIC
TEST	•	* CONFIGURATION	S * TEST	* TYPE OF	* SCALE	* TESTING	* TEST DMS	*PUBLICATIONS
1D 	* REPORT TIT	LE * TESTED	* PURPOS	* TEST	*MACH RANGE	E* AGENCY	* PERSONNEL	*OR COMMENTS
ARC	- *RESULTS OF E	XPFRT*	*TO ORTAIN FO	DRCE A*FORCE	*0.60 -	*ROCKWELL/	*A.R.KANEVSKY/RI	*DMS-DR-2476
11TWT	- *MENTAL INVES	· · · - · · -		LOADS*PRESSURE		*ARC -	*J. E. VAUGHN	*
	.3/*IONS TO DETE		*ON ET PROTUI		*		NSO*H. C. ZIMMERLE	*
97SWT	- *EXTERNAL TAN		*CES AND TO	*	*	*NIC WIND TU		*
IA190A	*PROTUBERANCE	LOAD*	*DETERMINE L	CAL F*	*	*L (UNITARY)	*	*
IA190B	*S USING A O.	03 SC*	*LOW VELOCIT		*	*9-FOOT BY 7	-FO*	*
	*ALE MODEL OF	THE *	*ET UPPER SUI	RFACE *	*	*OT SUPERSON	IC *	*
	*SPACE SHUTTL	E *	*NEAR CENTER		*	*WIND TUNNEL	(U*	*
	*LAUNCH CONFI	GURAT*	*	*	*	*NITARY)	*	*
	*ION (MODEL 4	7-0TS*	*	*	*	*	*	*
	*) IN THE NAS	A/ARC*	*	*	*	*	*	*
	*UNITARY PLAN	<b>*</b>	*	*	*	*	*	*
	*WIND TUNNEL	(IA19*	*	*	*	*	*	*
	*OA/B)	*	*	*	*	*	*	*
	*	*	*	*	*	*	*	*
MSFC	- *	*	*	*FORCE	*	*ROCKWELL/	*S. R. HOULIHAN	*DMS-DR-2479
14TWT	- +	*	*	*	*	*MSFC -	*J. E. VAUGHN	*
658	/*	*	*	*	*	*14-INCH TRI	SON*-DMS	*
I A600	*	*	*	*	*	*IC WIND TUN	NEL*	*
	*	*	*	*	*	*	*	*
LTV	- *	*0V102-SSME ON	*	*FORCE	* 0.02/	*LARC /	*J. E. VAUGHN	*DMS-DR-2484
HSWT	~ *	*OV102~SSME OFF	*	*	* 2.5-	*LTV -	∗G. W. KLUG	*
742	/*	*0V102-SSME ON V	T *	*	* 4.75	*HIGH SPEED	WIN*-DMS	*
LA144	*	*OFF	*	*	*	*D TUNNEL	*	*
	*	*	* ¹	*	*	*	*	*
AEDC	- *	*ORBITER FOREBOD	Y *TO OBTAIN C	ALIBRA*FORCE	*0.25 -	*ROCKWELL/	*S. R. HOULIHAN	*DMS-DR-2497
PWT16T	- *	*	*TION DATA F	OR THE*	*1.50	*AEDC -	*H. C. ZIMMERLE	*
594	<b>/</b> *	*	*FLUSH-ORIFI	CE SH *	*	*TRANSONIC P	ROP*-DMS	*
MA34	*	*	*UTTLE ENTRY	AIR *	*	*ULSION WIND		*
	*	*	*DATA SYSTEM	IN TH*	*	*NNEL (PWT-1	6T)*	*
	*	*	*E SUBSONIC/	TRANSO*	*	*	*	*
	*	*	*NIC RANGE	*	*	*	*	*
	*	*	*	*	*	*	*	*

WORK IN PROCESS WIND TUNNEL TEST / DMS DATA PROCESSING COGNIZANT BASIC TEST CONFIGURATIONS * TEST TYPE OF * SCALE* TESTING TEST DMS *PUBLICATIONS ID **TESTED PURPOSE** TEST *MACH RANGE* AGENCY **PERSONNEL** *OR COMMENTS MSFC - *RESULTS OF A ORBI*LAUNCH VEHICLE WI*WING LOAD RELIEF *FORCE * 0.004 / *ROCKWELL/ *F.H.NIEDERMEYER/R*DMS-DR-2518 14TWT - *TER WING AND ELEV*TH WING SPOILERS *INVESTIGATIONS * 0.60-*MSFC *I-H 695 /*ON LOADS ALLEVIAT*AND INTERSTAGE FA* * 1.96 *14-INCH TRISON*R.C.ARMSTRONG/MSF* IA301 *ION TEST UTILIZIN*IRINGS *IC WIND TUNNEL*C *G WING MOUNTED SP* *D. E. POUCHER *OILERS IN THE NAS* *J. L. GLYNN *A/MSFC 14-INCH TR* *-DMS *ISONIC WIND TUNNE* *L ON A 0.004-SCAL* *E MODEL (74-0TS) * *SPACE SHUTTLE INT* *EGRATED VEHICLE (* *IA301) AEDC - *RESULTS OF AEROHE*THIN-SKIN THERMOC*DFI LOCATIONS FOR*HEAT-TRANS*O.0175 / *ROCKWELL/ *J.MARROQUIN. C.R.*DMS-DR-2520 SWTA - *ATING DFI AND ET *OUPLE MODEL 60-OT*ET AND SRB HEATI * * 2.24-*AEDC *LEEF. D.J.WONG/RO* V-A-1X /*DESIGN-DATA TEST *S *NG PREDICTION MET* * 4.00 *SUPERSONIC WIN*CKWELL HWTC - *ON A O.0175-SCALE* *HODOLOGY *D TUNNEL (A) *D. E. POUCHER V-C-2E /*MODEL 60-OTS CON * *HYPERSONIC WIN*J. L. GLYNN IH97A/B/C *DUCTED IN THE VON* *D TUNNEL (C) *-DMS CR-167,693*KARMAN GAS DYNAM * *ICS FACILITY (VKF* *) 40-INCH SUPERSO* *NIC AND THE 50-IN* *CH HYPERSONIC WIN* *D TUNNELS A AND C* *(IH97A/B/C) ARC - *RESULTS OF THE AF*MODEL 126-O, AFRS*TO EVALUATE TWO A*PRESSURE +1.0 *ROCKWELL/ *R.B.KINGSLAND. J.*DMS-DR-2521 22TWT *RSI REWATERPROOFI*I *FRSI REWATERPROOF* * 0.3 -*ARC *MARROQUIN. J.RIVI* 560-1-22 /*NG SYSTEMS SCREEN* *ING SYSTEMS AND T* * 0.85 *2-FOOT BY 2-FO*N/ROCKWELL *ING TEST IN THE N* *OT TRANSONIC W*D. E. POUCHER 05310 *O INVESTIGATE FIL* CR-167,694*ASA/AMES RESEARCH* *MS AS A MEANS OF * *IND TUNNEL *J. L. GLYNN *CENTER (ARC) 2X2 * *-DMS *REDUCING BLANKET * *-FOOT TRANSONIC W* *JOINT DISTORTION * *IND TUNNEL (0S310* *)

#### WORK IN PROCESS WIND TUNNEL TEST / DMS DATA PROCESSING 370 *MODEL COGNIZANT BASIC CONFIGURATIONS * TEST TEST * TYPE OF * SCALE* TESTING TEST DMS *PUBLICATIONS ID * REPORT TITLE TESTED PURPOSE *OR COMMENTS TEST *MACH RANGE* AGENCY PERSONNEL **AEDC** *128-O. OMS POD CO*SIMULATION OF ENV*PRESSURE * 4.0 -*ROCKWELL/ *E.C.KNOX/ROCKWELL*DMS-DR-2522 HWTC *NTOUR MODEL *IRONMENTS EXISTIN* *AFDC -*D. E. POUCHER * 4.0 V-C-3E *G AT THE FRONT OF* *HYPERSONIC WIN*J. L. GLYNN 05315 *D TUNNEL (C) *-DMS *THE ORBITER OMS * *POD DURING ASCENT* *AND ENTRY LARC - *RESULTS OF WING A*LAUNCH VEHICLE WI*WING LOAD RELIEF *FORCE *0.01 / *LARC *G.M.WARE. J.C.YOU*DMS-DR-2523 16TT - *ND ELEVON LOAD AL*TH WING SPOILERS *INVESTIGATIONS * 0.8 -*LARC *NG. L.E.PUTNAM/LA* 390 /*LEVIATION TEST (T*AND INTERSTAGE FA* * 1.25 *16-FOOT TRANSO*RC LA301 *EST LA301) UTILIZ*IRINGS *NIC TUNNEL *D. E. POUCHER *ING A 1% SCALE SH* *J. L. GLYNN *UTTLE LAUNCH VEHI* *-DMS *CLE MODEL IN THE * *LANGLEY 16 FOOT T* ARC - *RESULTS OF A M=5.*PHASE-CHANGE PAIN*SUPERSONIC HEAT D*HEAT-TRANS*0.0175 / *ROCKWELL/ *W.H.DYE, J.C.MART*DMS-DR-2524 3.5HWT - *3 HEAT TRANSFER T*T MODEL, 56-OTS *ISTRIBUTION DATA * *ARC *INEZ/ROCKWELL * 5.3 -218 /*EST OF THE INTEGR* *BETWEEN ORBITER A* *3.5-FOOT HYPER*D. E. POUCHER * 5.3 IH42 *ATED VEHICLE USIN* *SONIC WIND TUN*J. L. GLYNN *ND ET CR-167,695*G PHASE~CHANGE PA* *NEL *-DMS *INT TECHNIQUES ON* *THE 0.0175-SCALE * *MODEL 56-OTS IN * *THE NASA/AMES RES* *EARCH CENTER 3.5-*

*FOOT HYPERSONIC W* *IND TUNNEL (IH42)*

Table 6-1
Space Shuttle Facility Wind Tunnel Summary

		SPACE SHUT	TLE FACILITY	Y WIND TUNNEL S			
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	
KT .				LA126	2436,V-06	AUGUST,	1978
vu	AEDC	НМТВ	B7A	онео	2356	MAY,	1977
VB	AEDC	HWTB	B8A	0H74	2263	MARCH,	1976
VC	AEDC	HWTB	C4A	IA114	2272,V-01	JUNE,	1977
vc	AEDC	HWTB	C4A	IA114	2272,V-02	JUNE,	1977
VJ	AEDC	HWTB	DBA	OA 169	2320,V-01	FEB.,	1978
VJ	AEDC	HWTB	D8A	DA 169	2320,V-02	FEB.,	1978
VJ	AEDC	HWTB	ABD	OA 169	2320,V-03	FEB.,	1978
VK	AEDC	HWTB	D9A	1A22	2327,V-01	JULY,	1977
VK	AEDC	HWTB	D9A	IA22	2327,V-02	AUGUST,	1977
VK	AEDC	HWTB	D9A	IA22	2327,V-03	AUGUST,	1977
VG	AEDC	HWTB	E3A	0H75	2303	MAY,	1976
vs	AEDC	HWTB	J7A	OH98	2340,V-01	SEPT.,	1980
vs	AEDC	HWTB	J7A	0Н98	2340.V-02	SEPT.,	1980
45	AEDC	HWTB	P4A	OH90A/MA29	2451	MAY,	1979
4D	AEDC	HWTB	TOA	IA148	2384,V-01	SEPT.,	1978
4D	AEDC	HWTB	TOA	IA148	2384,V-02	SEPT.,	1978
тм	AEDC	HWTB	VA289	OH3A	2100	JUNE,	1974
тт	AEDC	HWTB	VA352	OH4A	2154	JAN.,	1975
TZ	AEDC	HWTB	VA352	OH4C	2225	MARCH,	1975
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SPACE SHUTTLE FACILITY	WIND TUNNEL	. SUMMARY
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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
тк	AEDC	HWTB	VA352	OH4B	2099,V-01	FEB.,	1975
тк	AEDC	HWTB	VA352	OH4B	2099,V-02	FEB.,	1975
τĸ	AEDC	HWTB	VA352	ОН4В	2099,V-03	FEB.,	1975
V5	AEDC	HWTB	VA353	<b>0</b> H9	2251	JUNE,	1975
TS	AEDC	HWTB	VA354	OH11	2141	JUNE,	1975
<b>v</b> 3 ,	AEDC	HWTB	VA422	IA17B	2230	FEB.,	1975
TR ·	AEDC	HWTB	VA422	IA17A	2156,V-01	AUGUST,	1975
TR	AEDC	HWTB	VA422	IA17A	2156,V-02	AUGUST,	1975
TR	AEDC	HWTB	VA422	IA17A	2156,V-03	AUGUST,	1975
TN	AEDC	HWTB	VA474	DA77	2134,R-01	JAN.,	1975
VE	AEDC	HWTB	VA526/21BA	OH5OA	2285	APRIL,	1976
VM	AEDC	HWTB	V41B-E9A	<b>0</b> H69	2321,V-01	AUGUST,	1978
VM	AEDC	HWTB	V41B-E9A	OH69	2321,V-02	AUGUST,	1978
47	AEDC	HWTB	V41B-G9	0H109	2490.V-01	JULY,	1982
42	AEDC	HWTB	V41B-G9	0H109	2490,V-02	JULY,	1982
4Z	AEDC	HWTB	V41B-G9	0H109	2490,V-03	JULY,	1982
T1 .	AEDC	HWTB	V41B-H0	OA258	2491,V-01	SEPT.,	1983
T1	AEDC	HWTB	V41B-H0	OA258	2491,V-02	SEPT.,	1983
T1	AEDC	HWTB	V41B-H0	OA258	2491,V-03	SEPT.,	1983
T1	AEDC	HWTB	V41B-H0	OA258	2491,V-04	SEPT.,	1983
4A	AEDC	HWTB	V41B-K3A	OH57A/B	2367	MAY,	1979
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SPACE	SHUTTLE	<b>FACTLITY</b>	WIND TUNNEL	SUMMARY

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
нт	AEDC	HWTB	V41B-R3A	0H56	2410	JUNE,	1979
4E	AEDC	HWTB	V41B-R4A	OH84A	2388	MARCH,	1984
4H	AEDC	HWTB	V41B-V2A	OH103A	2420	NOV.,	1982
4M	AEDC	HWTB	V41B-V2C	DH103B	2427	JAN.,	1984
Т6	AEDC	HWTB	V41B-1C	OH111	2496,V-01	NOV.,	1982
Т6	AEDC	HWTB	V41B-1C	OH111	2496,V-02	NOV.,	1982
Т6	AEDC	HWTB	V41B-1C	OH111	2496,V-03	NOV.,	1982
4U	AEDC	HWTB	V41B-67	OH84B	2464,V-01	AUGUST,	1981
4U	AEDC	HWTB	V41B-67	OH84B	2464,V-02	AUGUST,	1981
4U	AEDC	HWTB	V41B-67	OH84B	2464,V-03	AUGUST,	1981
4U	AEDC	нитв	V41B-67	OH84B	2464,V-04	AUGUST,	1981
4V	AEDC	HWTB	V41B-67	0H105	2464,V-05	AUGUST,	1981
ТЗ	AEDC	HWTB	V42B-/V43B	OA259	2493,V-01	AUGUST,	1983
Т3	AEDC	HWTB	V42B-/V43B	OA259	2493,V-02	AUGUST,	1983
T2	AEDC	HWTB	V438-17	0H107	2492	JUNE,	1982
4T	AEDC	HWTB	41B,-65	0H102A	2455	JUNE,	1979
VY	AEDC	HWTB	41B-83A	0H25B	2366	MAY,	1977
TP	AEDC	HWTB	48Å	LA42	2132	MAY,	1975
vo	AEDC	HWTB	524	0H52	2330	OCT.,	1976
V1	AEDC	HWTB	57A	0H49B	2222,V-01	OCT.,	1976
V1	AEDC	HWTB	57A	0Н49В	2222,V-02	NOV.,	1976

		SPACE SHUT	TTLE FACILIT	Y WIND TUNNEL	SUMMARY		
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
VL	AEDC	HWTB	58A	OH5OB	2358	JUNE,	1977
TW	AEDC	HWTB	71A	0A79	2196	MAY,	1975
V9	AEDC	нwтв	748	0Н39	2241,V-01	JULY,	1980
V9	AEDC	HWTB	74A	0H39	2241,V-02	JULY,	1980
V9	AEDC	HWTB	74A	0H39	2241,V-03	JULY,	1980
V9	AEDC	HWTB	74A	0Н39	2241,V-04	JULY,	1980
VH	AEDC	HWTB	82A	0H54A	2301	MAY,	1976
VM	AEDC	HWTB	82A	0H54B	2342	JUNE,	1977
V6	AEDC	HWTB	AE8	0H25A	2252	JULY,	1975
D3	AEDC	HWTC	V-C-2E	IH97A/B/C	2520	IN PROCE	ss
D5	AEDC	HWTC	V-C-3E	05315	2522	IN PROCE	ss
TX	AEDC	HWTF	VA291	FH1O	2197	OCT.,	1974
TO	AEDC	HWTF	VA489	OA81	2152,R-01	JAN.,	1976
TY	AEDC	HWTF	25A	TH1F	2218	SEPT.,	1977
VA	AEDC	HWTF	28A	OA 160	2247	JAN.,	1976
71	AEDC	PWT16T	TF-551	0546A-G	2505	AUGUST,	1982
T5	AEDC	PWT16T	TF-556	0549	2483,V-01	JUNE,	1982
T5	AEDC	PWT16T	TF-556	0549	2483.V-02	JUNE,	1982

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SPACE SHUTTLE FACILITY WIND TU	UNNEL SUMMARY

CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
T8	AEDC	PWT 16T	TF-608	0\$56	2489 ,	JUNE,	1982
ЕА	AEDC	PWT 16T	TF645	05313	2513	MARCH,	1984
VR	AEDC	PWT 16T	431	0A232	2414,V-01	MAY,	1980
VR	AEDC	PWT 16T	431	OA232	2414,V-02	MAY,	1980
4B	AEDC	PWT 16T	470	IA 105A	2398,V-01	NOV.,	1981
4C	AEDC	PWT 16T	470	IA 156A	2403,V-01	JAN.,	1981
4B	AEDC	PWT 16T	470	IA 105A	2398,V-02	NOV.,	1981
4C	AEDC	PWT 16T	470	IA 156A	2403,V-02	JAN.,	1981
4B	AEDC	PWT16T	470	IA 105A	2398,V-03	NOV.,	1981
4C	AEDC	PWT16T	470	IA 156A	2403,V-03	JAN.,	1981
4R	AEDC	PWT16T	505	IA132	2449	FEB.,	1981
4N	AEDC	PWT16T	507	OA 129	2434	DEC.,	1979
4P	AEDC	PWT 16T	517	IA182	2439	NOV.,	1983
4Q	AEDC	PWT 16T	519	IA183	2444,V-01	APRIL,	1981
4Q	AEDC	PWT16T	519	IA183	2444,V-02	APRIL,	1981
4Y	AEDC	PWT16T	572	OA253	2486,V-01	OCT.,	1982
<b>4</b> Y	AEDC	PWT16T	572	0A253	2486,V-02	OCT.,	1982
T4	AEDC	PWT16T	594	MA34	2497	IN PROCE	SS
VP	AEDC	PWT4T	ЕЗА	SA 16F	2334	NOV.,	1976

## SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY

TEST				NASA			
CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
V8	AEDC	SWTA	ASA	IA111 .	2242,V-01	MARCH.	1976
V8	AEDC	SWTA	ASA	IA111	2242,V-02	MARCH,	1976
V7	AEDC	SWTA	A4A	IH41A	2240	APRIL,	1977
VF	AEDC	SWTA	A4A	IH41B	2295,V-01	SEPT.,	1977
VF	AEDC	SWTA	A4A	IH41B	2295,V-02	SEPT.,	1977
VF	AEDC	SWTA	A4A	IH41B	2295,V-03	SEPT.,	1977
VF	AEDC	SWTA	A4A	IH41B	2295,V-04	OCT.,	1977
VF	AEDC	SWTA	A4A	IH41B	2295.V-05	OCT.,	1977
VD	AEDC	SWTA	E1A	FH13	2276	JUNE,	1977
VI	AEDC	SWTA	J3A	IH47	2312,V-01	JUNE,	1977
VI	AEDC	SWTA	J3A	IH47	2312.V-02	JULY,	1977
VT	AEDC	SWTA	K1A	IA40	2293	DEC.,	1977
VQ	AEDC	SWTA	K1A	IA142	2346,V-01	JAN.,	1978
VQ	AEDC	SWTA	K1A	IA142	2346,V-02	JAN.,	1978
VQ	AEDC	SWTA	K1A	IA142	2346,V-03	JAN.,	1978
vx	AEDC	SWTA	P8A	IA143	2354,V-01	FEB.,	1978
vx	AEDC	SWTA	P8A	IA143	2354,V-02	FEB.,	1978
vx	AEDC	SWTA	P8A	IA143	2354,V-03	FEB.,	1978
vx	AEDC	SWTA	PBA	IA143	2354,V-04	FEB.,	1978
TJ	AEDC	SWTA	VA323	IA13	2062,V-01	AUGUST,	1975
TJ	AEDC	SWTA	VA323	IA13	2062,V-02	AUGUST,	1975

### SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATIO	ON DATE
TJ	AEDC	SWTA	VA323 -	IA13	2062,V-03	AUGUST,	1975
TL	AEDC	SWTA	VA422	IA57	2112	NOV.,	1974
TQ	AEDC	SWTA	VA422	IA61A	2143	FEB.,	1976
V4	AEDC	SWTA	VA422/21AA	IA61B	2226	FEB.,	1975
VW	AEDC	SWTA	VA525/218A	OH49A	2355	JUNE,	1977
D3	AEDC	SWTA	V-A-1X	IH97A/B/C	2520	IN PROCESS	
4ป	AEDC	SWTA	V41A-P5A	OA208/209	2415,V-02	JAN.,	1980
vz	AEDC	SWTA	V41A-R2A	IH72	2372	NOV.,	1981
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-01	APRIL,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-02	APRIL,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-03	APRIL,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-04	APRIL,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-05	MAY,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-06	MAY,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-07	MAY,	1980
4L	AEDC	SWTA	V41A-W5	IH85	2431,V-08	APRIL,	1980
4K	AEDC	SWTA	V41A-20	FH15	2422	APRIL,	1979
4W	AEDC	SWTA	V41A-67	IH102	2464.V-06	AUGUST,	1981
41	AEDC	SWTA	V41B-P5A	OA208/209	2415,V-01	JAN.,	1980
4X	AEDC	SWTA	V41B-65	0H400	2472	MAY,	1980
TU .	AEDC	SWTA	60A	1A87	2192.V-01	JULY,	1975

SPAC	CE SHUTTLE FACILITY WIND	TUNNEL SUMMARY

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
TU	AEDC	SWTA	60A	1A87	2192,V-02	JULY,	1975
TV	AEDC	SWTA	71A	OA 115	2198	JULY,	1975
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NF	ARC	11TWT			2255	JULY,	1975
EU	ARC	1 1TWT	014	IA19	2170,V-01	JUNE,	1975
EU	ARC	1 1TWT	014	IA19	2170,V-02	JUNE,	1975
EU	ARC	1 1TWT	014	IA19	2170,V-03	JUNE,	1975
ET	ARC	1,1TWT	019	ARBAI	2169,V-01	JAN.,	1976
ET	ARC	11TWT	019	IA81A	2169,V-02	JAN.,	1976
ET	ARC	1 1TWT	019	ALBAI	2169,V-03	JAN.,	1976
ET	ARC	1 1TWT	019	IA81A	2169,V-04	JAN.,	1976
ET	ARC	1 1TWT	019	IA81A	2169,V-05	JAN.,	1976
ET	ARC	1 1TWT	019	IA81A	2169,V-06	JAN.,	1976
ET	ARC	1 1TWT	019	IA81A	2169,V-07	JAN.,	1976
E4	ARC	1 1TWT	023	OBAI	2212,V-01	OCT.,	1976
E4	ARC	1 1TWT	023	OBAI	2212,V-02	OCT.,	1976
E4	ARC	1 1TWT	023	1A80	2212,V-03	ОСТ.,	1976
E4	ARC	1 1TWT	023	OBAI	2212,V-04	OCT.,	1976
NE	ARC	1 1TWT	072	IA72	2258,V-01	APRIL,	1977
NE	ARC	1 1TWT	072	IA72	2258,V-02	APRIL,	1977
NE	ARC	1 1TWT	072	IA72	2258,V-03	APRIL,	1977
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### SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION DATE	
NE	ARC	11TWT	072	IA72	2258,V-04	APRIL,	1977
NE	ARC	11TWT	072	IA72	2258.V-05	APRIL,	1977
NE	ARC	11TWT	072	IA72	2258.V-06	APRIL,	1977
NE	ARC	1 1 TWT	072	IA72	2258.V-07	APRIL,	1977
NE	ARC	11TWT	072	IA72	2258,V-08	APRIL,	1977
NE	ARC	11TWT	072	IA72	2258,V-09	APRIL,	1977
E8	ARC	11TWT	073	OA 148	2254,V-01	JULY,	1976
E8	ARC	11TWT	073	OA 148	2254,V-02	JULY,	1976
E8	ARC	11TWT	073	OA 148	2254,V-03	JULY,	1976
E8	ARC	11TWT	073	OA 148	2254,V-04	AUGUST,	1976
E8	ARC	11TWT	073	OA 148	2254,V-05	AUGUST,	1976
E8	ARC	11TWT	073	OA148	2254,V-06	AUGUST,	1976
E8	ARC	11TWT	073	OA 148	2254,V-07	AUGUST,	1976
E8	ARC	11TWT	073	OA 148	2254,V-08	AUGUST,	1976
E8	ARC	11TWT	073	OA 148	2254,V-09	SEPT.,	1976
E8	ARC .	11TWT	073	OA 148	2254,V~10	SEPT.,	1976
E8	ARC	11TWT	073	OA 148	2254,V-11	SEPT.,	1976
E8	ARC	11TWT	073	OA 148	2254,V-12	SEPT.,	1976
E8	ARC	11TWT	073	OA 148	2254,V-13	SEPT.,	1976
2K	ARC	11TWT	115	OA 149A	2376,V-01	JAN.,	1980
2K	ARC	11TWT	115	OA 149A	2376,V-02	JAN.,	1980
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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
2K	ARC	11TWT	115	OA 149A	2376.V-03	JAN.,	1980
2F	ARC	11TWT	118-1	OA 145A	2380,V-01	DEC.,	1980
2F	ARC	1 1 TWT	118-1	OA 145A	2380,V-02	DEC.,	1980
2F	ARC	11TWT	118-1	OA 145A	2380,V-03	DEC.	1980
2F	ARC	11TWT	118-1	OA 145A	2380,V-04	DEC.,	1980
2F	ARC	11TWT	118-1	OA 145A	2380,V-05	DEC.,	1980
2F	ARC	11TWT	118-1	OA 145A	2380,V-06	DEC.,	1980
A1 '	ARC	11TWT	145-1	OS31A	2470	AUGUST,	1983
2A	ARC	11TWT	187-1	OA 175	2333,V-01	NOV.,	1977
2A	ARC	11TWT	187-1	OA 175	2333,V-02	DEC.,	1977
2A	ARC	11TWT	187-1	OA 175	2333,V-03	DEC.,	1977
28	ARC	11TWT	200-1	LA77	2344,V-01	JAN.,	1980
2B	ARC	11TWT	200-1	LA77	2344,V-02	JAN.,	1980
2E	ARC	1 1TWT	213-1	LA89	2353	JUNE,	1981
2N	ARC	11TWT	228-1	IA144	2377.V-01	APRIL,	1982
2N	ARC	11TWT	228-1	IA144	2377,V-02	APRIL,	1982
2R	ARC	11TWT	275-1	IA119	2404.V-01	OCT.,	1980
2R	ARC	11TWT	275-1	IA119	2404 . V-02	OCT.,	1980
2R	ARC	11TWT	275-1	IA119	2404,V-03	ост.,	1980
2R	ARC	11TWT	275-1	IA119	2404,V-04	OCT.,	1980
3L .	ARC	11TWT	369-1	0536/37	2458	NOV.,	1983

SPACE	SHUTTLE	FACIL'	TTV	WIND	TUNNEL	SUMMARY	

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
30	ARC	11TWT	380-1	OS41	2463	NOV.,	1983
AM	ARC	11TWT	380-1	0543	2487	OCT.,	1982
3U	ARC	11TWT	411-1,2,3	IA 190A	2476	IN PROCES	s
AA	ARC	11TWT	412-1	IA191	2378	MARCH,	1981
AC	ARC	11TWT	425	0550	2485	JUNE,	1982
зх	ARC	11TWT	427-1/427-	OA400	2482,V-01	JAN.,	1981
зх	ARC	11TWT	427-1/427-	OA400	2482,V-02	JAN.,	1981
зх	ARC	11TWT	427-1/427-	0A400	2482,V-03	JAN.,	1981
AB	ARC	11TWT	436-2	<b>0</b> S52	2447	IN PROCES	s
AS	ARC	11TWT	500,07,31	0560,1,2,3	2506	DEC.,	1982 .
AP	ARC	1 I TWT	501-1	<b>O</b> S304A	2501	OCT.,	1982
AL	ARC	1 1TWT	503-1	OS302A	2469	JUNE,	1982
AU	ARC	11TWT	510-1	MA33A/B	2507	MARCH,	1984
AV	ARC	11TWT	548-1	OS306A/B	2508	JAN.,	1983
AY	ARC	11TWT	548-1	OS309A	2510	DEC.,	1982
AW	ARC	1 1TWT	549-1	0A307A/B	2509	DEC.,	1982
AZ	ARC	11TWT	561-1	14300	2511,V-01	OCT.,	1983
AZ	ARC	11TWT	561-1	14300	2511,V-02	OCT.,	1983
AZ	ARC	11TWT	561-1	1A300	2511,V-03	OCT.,	1983
A7	ARC	11TWT	562-1/5	OS305-1/5	2515	APRIL,	1984
A8	ARC	11TWT	562-2/5	0\$311	2516	AUGUST,	1984

CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
A2	ARC	1 1 TWT	587-1	DA31OA	2459,V-01	AUGUST,	1984
BL	ARC	11TWT	686	IA7	2024	AUGUST,	1973
EX	ARC	11TWT	705	OS8A/B	2179	NOV.,	1977
8-	ARC	1 1TWT	707	IA9A,B,C	2032,V-01	NOV.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-02	NOV.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-03	OCT.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-04	DEC.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-05	DEC.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-06	DEC.,	1973
B-	ARC	11TWT	707	IA9A,B,C	2032,V-07	DEC.,	1973
B-	ARC	1 1 TWT	707	IA9A,B,C	2032,V-08	DEC.,	1973
B	ARC	1 fTWT	707	IA9A,B,C	2032,V-09	JAN.,	1974
8-	ARC	11TWT	707	IA9A,B,C	2032,V-10	JAN.,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-11	JAN.,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-12	JAN.,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-13	MARCH,	1974
8-	ARC	11TWT	707	IA9A,B,C	2032,V-14	MARCH,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-15	MARCH,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-16	APRIL,	1974
B-	ARC	11TWT	707	IA9A,B,C	2032,V-17	APRIL,	1974
B-	ARC	1 1 TWT	707	IA9A,B,C	2032,V-18	MAY,	1974

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ION DATE
B2	ARC	11TWT	716	0A22A	2130	MAY,	1975
B 1	ARC	1 ITWT	716	IA14A	2084,V-01	FEB.,	1975
B1	ARC	11TWT	716	IA14A	2084,V-02	MARCH,	1975
B 1	ARC	1 1 T W T	716	IA14A	2084,V~03	APRIL,	1975
B1	ARC	11TWT	716	IA14A	2084,V-04	APRIL,	1975
B1	ARC	11TWT	716	IA14A	2084,V-05	APRIL,	1975
B1	ARC	11TWT	716	IA14A	2084,V-06	APRIL,	1975
В1	ARC	11TWT	716	IA14A	2084,V-07	APRIL,	1975
B1	ARC	11TWT	716	IA14A	2084,V-08	APRIL,	1975
B1	ARC	11TWT	716	IA14A	2084,V-09	MAY,	1975
В1	ARC	11TWT	716	IA14A	2084,V-10	MAY,	1975
В1	ARC	11TWT	716	IA14A	2084,V-11	MAY,	1975
EJ	ARC	11 <b>T</b> WT	747	OA53A	2128,V-01	AUGUST,	1974
EJ	ARC	11TWT	747	OA53A	2128,V-02	AUGUST,	1974
NX	ARC	11,97, <b>87</b> UN	074-1	SA11F	2331,V-01	OCT.,	1981
NX	ARC	11,97,87UN	074-1	SA11F	2331,V-02	OCT.,	1981
E7	ARC	11,97,87UN	094	OA161A/B/C	2245,V-01	SEPT.,	1976
E7	ARC	11,97,87UN	094	OA161A/B/C	2245,V-02	OCT.,	1976
NQ	ARC	11,97,87UN	144-1	IA135A/B/C	2306,V-01	MAY,	1982
NQ	ARC	11,97,87UN	144-1	IA135A/B/C	2306,V-02	MAY,	1982

EST				NASA			
CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
10	ARC	11,97,87UN	144-1	IA135A/B/C	2306,V-03	MAY,	1982
2 <b>Y</b>	ARC	11,97,87UN	289-1	OA126A,B,C	2424,V-01	OCT.,	1980
ΣΥ .	ARC	11,97, <b>8</b> 7UN	289-1	OA126A,B,C	2424,V-02	ОСТ.,	1980
3H	ARC	11,97,87UN	289-1	OA126A,B,C	2424,V-03	OCT.,	1980
s.	ARC	11,97, <b>8</b> 7UN	705-1	IS1A/B/C	2401	JAN.,	1978
NG	ARC	12PT	078	OA 159	2265	JAN	1976
4C	ARC	12PT	086	LA65	2246	JULY,	1976
ŧU.	ARC	12PT	135-1	LA66	2281	SEPT.,	1976
15	ARC	12PT	180-1	OA 173	2304	NOV.,	1981
2Q	ARC	12PT	218-1	0A101	2405,V-01	SEPT.,	1978
20	ARC	12PT	218-1	DA 101	2405.V-02	SEPT.,	1978
2 <b>Q</b>	ARC	12PT	218-1	OA 101	2405,V-03.	SEPT.,	1978
2 <b>Q</b>	ARC	12PT	218-1	0A101	2405,V-04	SEPT.,	1978
20	ARC	12PT	218-1	<b>UA 101</b>	2405,V-05	SEPT.,	1978
2 <b>Q</b>	ARC	<b>12</b> PT	218-1	0A101	2405,V-06	ост.,	1978
9	ARC	14-TWT	080	CA23A	2243	JAN.,	1976
∙- ∛H	ARC	14-TWT	120	CA23B	2275,V-01	MAY,	1976
IH	ARC	14-TWT	120	CA23B	2275,V-02	MAY,	1976
ız	ARC	14-TWT	121	CA 13	2332	OCT.,	1977

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TEST	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
NY	ARC	14-TWT	143-1	IA137	2316	SEPT.,	1976
NL	ARC	14-TWT	150-1	0A220	2286	OCT.,	1976
вк	ARC	14-TWT	711	BAI	2173	JULY,	1974
<b>3</b> Y	ARC	22TWT	041,154,11	OS4A	2450	MAY,	1979
2C	ARC	22TWT	167-1	0\$32	2339	IN PROCES	ss
ЗТ	ARC	22TWT	382-1	OA252	2473,V-01	JAN.,	1983
3T	ARC	22TWT	382-1	OA252	2473,V-02	JAN.,	1983
AE	ARC	22TWT	458	08300	2488	SEPT.,	1981
AK .	ARC	22TWF	467-1	05301	2500	DEC.,	1981
AX ·	ARC	22TWT	542 <del>.</del> 1	80EA0	2512	SEPT.,	1983
D4	ARC	22TWT	560-1-22	05310	2521	IN PROCES	ss
BI	ARC	3.5HWT	147	OA4	2007	MARCH.	1973
BS	ARC	3.5HWT	157	OA 1 1A	2044	ОСТ.,	1973
BU	ARC	3.5HWT	158	OH2A	2035 /	APRIL,	1974
вх	ARC	3.5HWT	160	OA 1 1B	2059	JUNE,	1974
ВУ	ARC	3.5HWT	163	0A58	2060	JUNE,	1974
B5	ARC	3.5HWT	167	0A73	2082	DEC.,	1973
B6	ARC	3.5HWT	168	OA23	2071	SEPT.,	1974
B7	ARC	3.5HWT	169	IA10	2078	JAN.,	1974

TEST		****		NASA			
CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICAT	ON DATE
89	ARC	3.5HWT	171	0H10	2085	JAN.,	1982
B8	ARC	3.5HWT	172	IH15	2098	ост.,	1974
ED	ARC	3.5HWT	173	0H15	2385	SEPT.,	1977
EG	ARC	3.5HWT	175°	IA15	2102	APRIL,	1974
EF	ARC	3.5HWT	176	OA87 '	2115	MARCH,	1974
ЕН	ARC	3.5HWT	177	0H44	2386	SEPT.,	1977
EI	ARC	3.5HWT	178	IНЗ	2136,V-01	MAY,	1975
ΕÍ	ARC	3.5HWT	178	IH3	2136,V-02	MAY,	1975
ΕI	ARC	3.5HWT	178	ІНЗ	2136,V-03	MAY,	1975
EI	ARC	3.5HWT	178	ІНЗ	2136.V-04	MARCH,	1976
EM	ARC	3.5HWT	180	IA16	2124	MAY,	1974
ND	ARC	3.5HWT	182	0H43	2250	JULY,	1975
EQ	ARC	3.5HWT	183	0H6	2151	NOV.,	1975
EN	ARC	3.5HWT	185	IH20	2148,V-01	JUNE,	1975
EN	ARC	3.5HWT	185	1H2O	2148,V-02	JUNE,	1975
EP	ARC	3.5HWT	187	0A36	2162	NOV.,	1974
EQ	ARC	3.5HWT	190	0A98	2167	AUGUST,	1975
ES	ARC	3.5HWT	191	IA18	2160	MARCH,	1975
EW	ARC	3.5HWT	194	C8A0	2177	MARCH,	1975
EV	ARC	3.5HWT	195.	IH28	2180,V-01	SEPT.,	1976
EV	ARC	3.5HWT	195	IH28	2180,V-02	SEPT.,	1976
	. <b></b>	. <i>.</i>					

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
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EY	ARC	3.5HWT	196	TA9F	2181	NOV.,	1974
EZ	ARC	3.5HWT	198	0H38	2171,V-01	JAN.,	1976
EZ	ARC	3.5HWT	198	0H38	2171,V-02	JAN.,	1976
EZ	ARC	3.5HWT	198	0H38	2171,V-03	JAN.,	1976
E2	ARC	3.5HWT	199	0H26	2193	OCT.,	1977
E3	ARC	3.5HWT	200	IH27	2210	JUNE,	1979
NB	ARC	3.5HWT	211	IH48	2248	APRIL,	1976
NT	ARC	3.5HWT	215	FH14	2313,V-01	MARCH,	1977
NT	ARC	3.5HWT	215	FH14	2313,V-02	MARCH,	1977
NT	ARC	3.5HWT	215	FH14	2313,V-03	MARCH,	1977
NV	ARC	3.5HWT	216	OH53A	2317	JAN.,	1980
D7	ARC	3.5HWT	218	IH42	2524	IN PROCES	S
2D	ARC	3.5HWT	222	1H68	2357	JUNE,	1983
3Z	ARC	3.5HWT	227	IH100	2418	OCT.,	1978
20	ARC	3.5HWT	228-1	IH51A	2393,V-01	FEB.,	1984
20	ARC	3.5HWT	228-1	IH51A	2393,V-02	FEB.,	1984
20	ARC	3.5HWT	228-1	IH51A	2393,V-03	FEB.,	1984
20	ARC	3.5HWT	228-1	IH51A	2393,V-04	FEB.,	1984
2P	ARC	3.5HWT	230	IH99	2452	SEPT.	1982
2V	ARC	3.5HWT	233-1	IH73	2407	SEPT.,	1982
2W	ARC	3.5HWT	234-1	IH90	2412,V-01	DEC.,	1982

SPACE	SHUTTLE FACT	ILITY WIND	TUNNEL	SUMMARY	

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
2 <b>W</b>	ARC	3.5HWT	234-1	IH90	2412.V-02	DEC.,	1982
2X	ARC	3.5HWT	235	OH58	2417	JUNE,	1979
ЗА	ARC	3.5HWT	237	FH16	2423	JAN.,	1980
3C	ARC	3.5HWT	239	IH51B	2429	APRIL,	1982
3F	ARC	3.5HWT	241	IH51C	2448,V-01	ОСТ.,	1980
3F -	ARC	3.5HWT	241	IH51C	2448,V-02	OCT.,	1980
3N	ARC	3.5HWT	244	IH51D	2461	MARCH,	1984
3P	ARC	3.5HWT	245	IH103	2467	AUGUST,	1981
3R	ARC	3.5HWT	247	0H105B	2468	JUNE,	1982
3 <b>W</b>	ARC	3.5HWT	250	IH104	2480	AUGUST,	1983
AG	ARC	3.5HWT	253	0H110	2495	ост.,	1981
АН	ARC	3.5HWT	254	DH108	2494	JUNE,	1982
NA	ARC	40SWT	462	0A 100	2261,V-01	JULY,	1982
NA	ARC	40SWT	462	<b>DA 100</b>	2261,V-02	JULY,	1982
NM	ARC	40SWT	473	OA 164	2499	AUGUST,	1981
NO	ARC	40SWT	479	OA 174	2302,V-01	MAY,	1982
NO	ARC	40SWT	479	OA 174	2302,V-02	MAY,	1982
2 <b>M</b>	ARC	4OSWT	500	OA237	2375	DEC.,	1980
EB	ARC	66SWT	630	IA29	2077,V-01	MAY,	1974

		SPACE SHUT	TLE FACILITY	WIND TUNNEL S	SUMMARY		
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ON DATE
EB	ARC	66SWT	630	IA29	2077.V-02	MAY,	1974
EB	ARC	66SWT	630	QA63	2077,V-03	MAY,	1974
вн	ARC	66SWT	650	DA3	2009	JUNE,	1973
вт	ARC	66SWT	706	DA43	2050	NOV.,	1973
ER	ARC	66SWT	709	OA59 .	2159,V-01	OCT.,	1974
ER	ARC	66SWT	709	OA59	2159,V-02	OCT.,	1974
E5	ARC	87SWT	044	IA82C	2219,V-01	APRIL,	1976
E5	ARC	87SWT	044	IA82C	2219,V-02	APRIL,	1976
2K	ARC	87SWT	115-1	OA 149B/C	2370,V-01	APRIL,	1980
2K	ARC	87SWT	115-1	OA149B/C	2370,V-02	APRIL,	1980
2K	ARC	87SWT	115-1	OA149B/C	2370,V-03	MAY,	1980
2H	ARC	87SWT	118-1	OA 145C	2389,V-01	JUNE,	1981
2H	ARC	87SWT	118-1	OA 145C	2389,V-02	JUNE,	1981
2H	ARC	87SWT	118-1	OA 145C	2389,V-03	JUNE,	1981
21	ARC	87SWT	119	OA221B/C	2360,V-01	DEC.,	1980
21	ARC	87SWT	119	OA221B/C	2360,V-02	DEC.,	1980
3 <b>G</b>	ARC	87SWT	318-1	OA 146	2445,V-01	JUNE,	1983
3G	ARC	87SWT	318-1	OA 146	2445,V-02	JUNE,	1983
вz	ARC	87SWT	710	IA12C	2065,V-01	APRIL,	1975
BZ	ARC	87SWT	710	IA120	2065,V-02	APRIL,	1975
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			TLE FACILITY	Y WIND TUNNEL	SUMMARY		
TEST CODE	FACILITY	SUBFACILITY		NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
BZ	ARC	87SWT	710	IA12C	2065,V-03	APRIL,	1975
EL	ARC	87SWT	747	OA53C	2185	SEPT.,	1974
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ET	ARC	97SWT	019	IA81B	2194,V-01	NOV.,	1975
ET	ARC	975WT	019	IA81B	2194,V-02	DEC.,	1975
ET .	ARC	97SWT	019	IA81B	2194,V-03	DEC.,	1975
ET	ARC	97SWT	019	IA81B	2194,V-04	DEC.,	1975
ET	ARC	97SWT	019	IA81B	2194,V-05	DEC.,	1975
E6	ARC	97SWT	044	IA82B	2231,V-01	APRIL,	1976
E6	ARC	97SWT	044	IA82B	2231,V-02	APRIL,	1976
E f	ARC	97\$WT	052	IA110	2189	MARCH,	1975
NK	ARC	97SWT	113	IS2A/B	2284,V-01	MAY,	1977
NK	ARC	97SWT	113	IS2A/B	2284,V-02	MAY,	1977
2K	ARC	97SWT	115-1	0A149B/C	2370,V-01	APRIL,	1980
2K	ARC	97SWT	115-1	OA149B/C	2370,V-02	APRIL,	1980
2K	ARC	97SWT	115-1	OA149B/C	2370,V-03	MAY,	1980
G2	ARC	97SWT	118-1	OA 145B	2364,V-01	FEB.,	1981
G2	ARC	97SWT	118-1	OA145B	2364,V-02	MARCH,	1981
G2	ARC	97SWT	118-1	OA 145B	2364,V-03	FEB.,	1981
21	ARC	97\$WT	119-1	OA221B/C	2360,V-01	DEC.,	1980
21	ARC	97SWT	119-1	0A221B/C	2360,V-02	DEC.,	1980

SPACE	SHUTTLE	<b>FACTLITY</b>	WIND TUNNEL	SHIMMADY

TEST				NASA			
CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICATIO	N DATE
NN	ARC	97SWT	166-1	OS 13	2287	IN PROCESS	
2U	ARC	97SWT	242-1	IA 105B	2413,V-01	FEB.,	1982
2U	ARC	975WT	242-1	IA105B	2413,V-02	FEB.,	1982
3D	ARC	97SWT	246-1	IA138	2438,V-01	FEB.,	1982
3D	ARC	97SWT	246-1	IA138	2438,V-02	FEB.,	1982
3D	ARC	97SWT	246-1	IA138	2438,V-03	FEB.,	1982
2T	ARC	97SWT	272	IA156B	2408, V-01	JULY,	1980
2T	ARC	97SWT	272	IA156B	2408,V-02	JULY,	1980
2T	ARC	97SWT	272	IA 156B	2408,V-03	JULY,	1980
22	ARC	97SWT	282-1	OA251B/C	2421,V-01	DEC.,	1980
22	ARC	97SWT	282-1	OA251B/C	2421,V-02	DEC.,	1980
3E	ARC	97SWT	283-1	IA131B/C	2462,V-01	MARCH,	1983
3E	ARC	97SWT	283-1	IA131B/C	2462,V-02	MARCH,	1983
.3K	ARC	97SWT	347-1	IA184	2456,V-01	SEPT.,	1980
зк	ARC	97SWT	347-1	IA184	2456,V-02	SEPT.,	1980
AJ	ARC	97SWT	464	OS55/57	2465	MARCH,	1984
AQ	ARC	97SWT	501-1	O\$304B	2502	AUGUST,	1982
AO	ARC	97SWT	503-1	0\$302B	2504	SEPT.,	1982
A9	ARC	97SWT	582-1	OS314A/B/C	2517	DCT.,	1984
BJ	ARC	97\$WT	616	IA2	2013	FEB.,	1974
BV	ARC	97SWT	710	IA12B	2048	JULY,	1974

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EST CODE	FACILITY	SUBFACILITY		NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DAT
34	ARC	97SWT	716	0A22B	2131	MAY,	1975
33	ARC	97SWT	716	IA14B	2129,V-01	MAY,	1975
33	ARC	97SWT	716	IA14B	2129,V-02	MAY, .	1975
	ARC	97SWT		0A53B		AUGUST,	
	CALSPAN	LT	195-100	IH75	2453	JUNE,	1979
JG	CALSPAN	48HST			2164,V-02		
IL	CALSPAN	48HST	181	IH5	2308	OCT.,	1976
I	CALSPAN	48HST	184-120	CEAO	2238	NOV.,	1976
н	CALSPAN	48HST	184-220	OA 113	2234	JULY,	1975
IJ	CALSPAN	48HST	185-131	IH33	2249	JUNE,	1979
IM	CALSPAN	48HST	189	IH43	2319	JUNE,	1979
G	CALSPAN	48HST	173-100	0H12	2164,V-01	JAN.,	1976
G	CALSPAN	48HST	173-100	0H12	2164,V-03	·	
ıF	CALSPAN	8TWT	T14-053	IA36	2064,V-01	DEC.,	
F	CALSPAN	8TWT	T14-053	IA36	2064.V-02	DEC.,	1975
ĸ	CALSPAN	8TWT	T18-103	LA70	2269	SEPT.,	1976
N	CALSPAN	8TWT	T18-111	LA82	2374	OCT.,	1982

SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY									
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE		
UO	CALSPAN	96HST	131	он66	2359	MARCH,	1978		
GN	JSC		56-A-76		2371	MAY,			
5 <b>A</b>	JSC		61-A-78	0Н79	2443	JUNE,	1979		
PX	LARC	СЕНТ	100	LA25	2126	CANCELLED			
10	LARC	CFHT	101	0A85	2113	OCT.,	1974		
QU	LARC	CFHT	102	LA35	2127	JULY,	1974		
нн	LARC	CFHT	104	LA47	2191	JULY,	1975		
QQ	LARC	CFHT	105	LA34	2328	AUGUST,	1976		
QK	LARC	CFHT	107	IA58	2133	JULY,	1974		
H1	LARC	CFHT	108	1460	2137,V-01,R-01	SEPT.,	1974		
H2	LARC	CFHT	109	OA 105	2137,V-02	JULY,	1974		
QJ	LARC	CFHT	110	0A90	2149	AUGUST,	1975		
HD	LARC	CFHT	112	OH5 1	2368	APRIL,	1977		
HL	LARC	CFHT	1 13	OA82	2195	FEB.,	1975		
нх	LARC	CFHT	114	LA57	2454,V-03	APRIL,	1979		
JA	LARC	CFHT	1 18	MA22	2267,V-01	JUNE.	1976		
JA	LARC	CFHT	118	MA22	2267,V-02	JUNE,	1976		
JA	LARC	CFHT	1 18	MA22	2267,V-03	JUNE,	1976		
JA	LARC	CFHT	1 18	MA22	2267,V-04	JUNE,	1976		
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		SPACE SHUT	TLE FACILITY	Y WIND TUNNEL	SUMMARY		
TEST	FACILITY	SUBFACILITY		NASA SERIES NO.		PUBLICAT	ION DATE
K2	LARC	CFHT	130	LA93	2383	IN PROCES	ss
0Z	LARC	СГНТ	85	LA3	2031	JUNE,	1973
OT	LARC	CFHT	89	MA4	2008	JAN.,	1973
ОТ	LARC	CFHT	89	MA4	2008,R-01	MAY,	1973
PD	LARC	CFHT	96	LA11	2066	NOV.,	1973
QO .	LARC	CFHT	97	LA32	2168	MAY,	1974
QN	LARC	СГНТ	98	LA31	2047	FEB.,	1974
PF	LARC	CFHT	99	LA13	2135	CANCELLE	D
QS	LARC	CF4	121-137	0H45	2109	JAN.,	1976
но	LARC	CF4	220-237	LA53	2213	IN PROCES	ss
J5	LARC	CF4	267-268	LA78	2311	AUGUST,	1976
QM	LARC	CF4	97-118	IH18	2110	JAN.,	1976
QE	LARC	HNT	28	IH19	2157	DEC.,	1975
QD	LARC	HNT	30-31	OA89	2214	APRIL,	1975
HW	LARC	LARC	699	LA56	2224	MARCH,	1978
P <b>7</b>	LARC	LTPT	130/135	LA9	2056	NOV.,	1973
PP	LARC	LTPT	138	OA 17	2058	MARCH,	1974

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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
PU	LARC	LTPT	141	LA23	2070	ост.,	1973
JS	LARC	LTPT	214	LA36B	2292	IN PROCES	SS
J2	LARC	LTPT	219	LA61	2278	CANCELLE	)
JE	LARC	LTPT	227	LA73A	2298	MAY,	1978
JT	LARC	LTPT	228	LA61B	2300	DCT.,	1976
JP	LARC	LTPT	229	LA81	2296, V-01	AUGUST,	1976
JP	LARC	LTPT	229	LA81	2296,V-02	AUGUST,	1976
KA	LARC	LTPT	246	LA 104	2387	CANCELLE	D
κυ	LARC	LTPT	255	LA 127	2441	IN PROCE	ss
HR	LARC	TDT	246	057	2363	APRIL,	1977
HR	LARC	TOT	246	056	2365	APRIL,	1977
00	LARC	UPWT	1002	MA5	2001	NOV.,	1972
ov	LARC	UPWT	1007	OA7	2014	MARCH,	1973
P8	LARC	UPWT	1015	LA 10	2052	NOV.,	1973
P <b>6</b>	LARC	UPWT	1023/1034	LA8A	2054	NOV.,	1973
P <b>M</b>	LARC	UPWT	1031	MA7	2069	JAN.,	1974
PN	LARC	UPWT	1035	<b>0A44</b>	2057	NOV.,	1974
P6	LARC	UPWT	1040	LABC	2090	MARCH,	1974
PQ	LARC	UPWT	1041	IH16	2166	JULY,	1975

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
PV	LARC	UPWT	1043	<b>DA70</b>	2073	MARCH,	1974
PG	LARC	UPWT	1046/1049	LA14A	2106	JAN.,	1975
Q6	LARC	UPWT	1056/1073	IA42A	2119	AUGUST,	1974
Q2	LARC	UPWT	1057	DA20A	2083	FEB.,	1974
02	LARC	UPWT	1057	OA2OC	2147	MAY,	1974
03	LARC	UPWT	1059	IH4	2138,V-01	MAY,	1976
Q3	LARC	UPWT	1059	IH4	2138,V-02	JULY,	1976
03	LARC	UPWT	1059	IH4	2138,V-03	JULY,	1976
03	LARC	UPWT	1059	IH4	2138,V-04	JULY,	1976
Q4	LARC	UPWT	1063	IA35	2108	MAY,	1974
Q7	LARC	UPWT	1071	IH1	2153	DCT	1977
H5	LARC	UPWT	1074	LA43A/B	2199	ОСТ.,	1976
QY	LARC	UPWT	1075	LA39	2188	IN PROCES	s
Н9	LARC	UPWT	1087	SA25F	2150	MARCH,	1975
Н8	LARC	UPWT	1088/1119	IA44	2206	MAY,	1975
HG	LARC	UPWT	1092//1117	LA46A/B	2228	IN PROCES	ss
Q2	LARC	UPWT	1097	OA2OB	2163	SEPT.,	1974
HJ	LARC	UPWT	1101	LA49	2182	APRIL,	1977
HA	LARC	UPWT	1115	SH12F	2216	AUGUST,	1975
J4	LARC	UPWT	1118	LA63A	2270	DEC.,	1975
нв	LARC	UPWT	1145	LA45A/B	2297	NOV.,	1976

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CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICAT	ON DATE
JC	LARC	UPWT	1147 /1132	LA71A/B	2271	FEB.,	1977
J4	LARC	UPWT	1151	LA63B	2279	JUNE,	1976
JK	LARC	UPWT	1152	IA94A	2323	FEB.,	1977
JH	LARC	UPWT	1173	LA75	2318,V-01	DEC.,	1976
JH	LARC	UPWT	1173	LA75	2318,V-02	DEC.,	1976
JW	LARC	UPWT	1177	IA94B	2324	FEB.,	1977
KD ,	LARC	UPWT .	1194	LA101	2390 .	JUNE,	1980
KR	LARC	UPWT	1207 LG2	LA 124	2426	JUNE,	1978
KI .	LARC	UPWT	1212	LA110	2396	DEC.,	1977
KK	LARC	UPWT	1217	LA114	2399	NOV.,	1977
KS	LARC	UPWT	1243	LA 125	2432	OCT.,	1981
κ <b>ν</b>	LARC	UPWT	1267	IA180	2457	MARCH,	1981
кx	LARC	UPWT	1270	LA122	2446	IN PROCE	ss
7 <b>A</b>	LARC	UPWT	1299	LA131	2478,V-01	AUGUST,	1980
7A	LARC	UPWT	1299	LA131	2478,V-02	AUGUST,	1980
7 <b>A</b>	LARC	UPWT	1299	LA 131	2478,V-03	AUGUST,	1980
7B	LARC	UPWT	1311	OA255	2498 .	AUGUST,	1983
7H	LARC	UPWT	1345 /1390	LA 145	2336	MAY,	1983
P 1	LARC	UPWT	995 /1014	LA4	2033	JULY,	1973
J7	LARC	V/STOL	114	OA 155	2237	IN PROCE	ss

	SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY								
TEST CODE	FACILITY	SUBFACILITY		NASA SERIES NO.	DMS-DR-	PUBLICATIO	ON DATE		
JF	LARC	V/STOL	129	CAB	2290,V-01	NOV.,	1976		
JF	LARC	V/STOL	129	CAB	2290,V-02	NOV.,	1976		
JF	LARC	V/STOL	129	CA8	2290,V-03	NOV.,	1976		
JU	LARC	16TT	312	OA224	2329	AUGUST,	1981		
КР	LARC	16TT	325	OA270B/C	2419	SEPT.,	1978		
KN	LARC	16TT	326	OA270A	2430,V-01	MARCH,	1981		
KN	LARC	16TT	326	<b>0</b> A270A	2430.V-02	MARCH.	1981		
KN	LARC	16TT	326	DA270A	2430.V-03	MARCH,	1981		
KW	LARC	16TT	341	LA 132	2471	JAN.,	1981		
KY	LARC	16TT	342	LA140	2475	AUGUST,	1980		
D6	LARC	16TT	390	LA301	2523	IN PROCESS	S		
PH	LARC	20HT6	441	LA15	2079	APRIL,	1974		
HN ·	LARC	20HT6	6458	LA52	2220,V-08	DEC.,	1984		
KZ	LARC	20HT 6	6546	LA141A/B	2477	JUNE,	1981		
7E	LARC	20HT6	6559	OA257	2466,V-01	JULY,	1983		
7E	LARC	20HT6	6559	OA257	2466,V-02	JULY,	1983		
ON	LARC	22HT	405	LA22	2034	JULY,	1973		
os	LARC	22HT	409	MA2	2003	APRIL,	1973		
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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
OY	LARC	22HT	411	LA2	2023	JUNE,	1973
P2	LARC ·	22HT	413	LA5	2036	AUGUST,	1973
PT	LARC	22HT	415	0A72	2092	NOV.,	1974
QC	LARC	22HT	422	8840	2125	SEPT.,	1974
нз	LARC	22HT	426	LA40	2176	MAY,	1978
HE	LARC	22HT	431	OA 109	2205	MAY,	1975
J8	LARC	22HT	439	LA68	2256	IN PROCES	S
JΥ	LARC	22HT	445	LA85	2343	DEC.,	1981
PZ	LARC	26 <b>T</b> BT	544	052	2067	AUGUST,	1973
QT	LARC	26 <b>T</b> BT	545	OS1	2094	MARCH,	1974
HF	LARC	26TBT	547	154	2146	APRIL,	1974
H7	LARC	60VS	R3289	OA99	2172	OCT.,	1974
JN	LARC	710HST	999	LA80	2299	JUNE,	1977
OU	LARC	8TPT	626	LA1	2002	MARCH,	1973
P4	LARC	81PT	643	LA6	2040	AUGUST,	1973
P5	LARC	8ТРТ	644	LA7A	2041	σст.,	1973
PC	LARC	8TPT	648	LA 17	2046	AUGUST.	1973

SPACE	SHUTTLE	FACILITY	WIND	TUNNEL	SUMMARY	

TEST	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
PS	LARC	8ТРТ	655	SA2FA	2088	JULY,	1974
P5	LARC	втрт	657/660	LA7B	2091	MARCH,	1975
Q1	LARC	8ТРТ	661	0A25	2089	APRIL,	1974
Q8	LARC	8ТРТ	667	IA41	2118	AUGUST,	1974
QZ	LARC	8ТРТ	668	<b>DA 106</b>	2120	JAN.,	1975
QX	LARC	8ТРТ	669	LA38A	2121	CANCELLE	D
ΟX	LARC	8ТРТ	676	LA38B	2239	IN PROCES	ss
H6	LARC	8ТРТ	677	LA44	2200	ост.,	1976
HI	LARC	8ТРТ	680	LA48	2184	APRIL,	1977
HV	LARC	8TPT	684	LA51	2183	FEB.,	1977
HU	LARC	8ТРТ	686	OA 116	2186	JAN.,	1975
нм	LARC	8ТРТ	687	OA 102	2229	FEB.,	1975
HC	LARC	8ТРТ	693	1A43	2204	MAY,	1975
HZ	LARC	8ТРТ	703	LA59	2233	JUNE,	1977
Ji	LARC	8ТРТ	704	LA60A	2259	CANCELLE	D
J9	LARC	8ТРТ	714	LA69	2257	SEPT.,	1977
KB	LARC	, ВТРТ	715	LA60B	2260	IN PROCES	ss
J3	LARC	8TPT	717	LA62	2264	DEC.,	1975
JD	LARC	8ТРТ	740	LA72	2309	NOV.,	1976
JJ	LARC	8 <b>T</b> PT	749	EPAI	2326,V-01	JAN.,	1977
JJ	LARC	8 <b>T</b> PT	749	EPAI	2326,V-02	FEB.,	1977

SPACE	SHUTTLE	FACILITY	WIND	TUNNEL	SUMMARY	

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATION	ON DATE
J6	LARC	8ТРТ	758	LA91	2352	JAN.,	1978
K1	LARC	8TPT	764	LA92	2362	IN PROCES	s
К9	LARC	8ТРТ	769	LA99	2373	MARCH,	1981
кс	LARC	8TPT	776	LA 106	2379	IN PROCES	s
KE	LARC	втрт	779	IA244	2391	MARCH,	1982
KF	LARC	8TPT	780	LA 107	2381	JUNE,	1983
кн	LARC	8ТРТ	780	LA113	2397	APRIL,	1982
KJ	LARC	8ТРТ	786	LA111	2395	JAN.,	1978
KL	LARC	8ТРТ	803	LA115	2409	SEPT.,	1981
KM	LARC	8ТРТ	804	LA116	2411	IN PROCES	s
ко	LARC	8ТРТ	813	LA117	2425	IN PROCES	S
7C	LARC	8ТРТ	905,6,7,9	OS53A	2503	JULY,	1982
οx	LARC	8VDHT	3619/3670	0H40	2049	JULY,	1973
Р3	LARC	8VDHT	3778//3855	OH41	2075	OCT.,	1973
P9	LARC	8VDHT	4060//4079	OH41A	2076	OCT.,	1973
PA	LARC	8VDHT	4080/4105	OH42A	2101	JAN.,	1974
QR	LARC	8VDHT	4502-4601	OH46	2350	APRIL,	1977
РВ	LARC	8VDHT	624	LA16	2043	JUNE,	1973
PO	LARC	8VDHT	644	OH13	2096	AUGUST,	1974
PR	LARC	8VDHT	646/647	IH17	2105	SEPT.,	1976
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		SPACE SHUT	TLE FACILITY	WIND TUNNEL S	UMMARY		
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	
QL	LARC	8VDHT	648	0H14	2117	SEPT.,	1976
PK .		8VDHT	653	LA2O	2107	MARCH,	
GG	LERC	SPF		<b>0</b> H64	2288	NOV.,	1977
GE	LERC	10SWT	035	.ŞA6F	2161	FEB.,	
GF	LERC	10SWT	038	IH34	2282	APRIL,	1978
GK	LERC	10SWT	041	IH39	2435	oct.,	1978
GY	LERC	10SWT	042	OA234 .	2400	ост.,	1980
GZ	LERC	10SWT	044	IH83	2440	FEB.,	1979
GI	LERC	10SWT	045	IH11	2428,V-01	FEB.,	1981
GI	LERC	10SWT	045	IH11	2428,V-02	FEB.,	1981
GI	LERC	10SWT	045	IH11	2428,V-03	FEB.,	1981
GI	LERC	10SWT	045	IH11	2428,V-04	FEB.,	1981
A4	LERC	10SWT	074	0A310B	2459,V-02	AUGUST,	1984
	LERC	86SWT	046	OA310A	2459,V-02	AUGUST,	1984
DE	LTV		458		2015,V-01	JULY,	
DE	LTV	HSWT	458	IA4	2015,V-02	JULY,	1973
FO	LTV	HSWT	488	<b>DA84</b>	2037	SEPT.,	1974
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SPACE	SHUTTI F	FACILITY	WIND	TUNNEL	SUMMARY

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATIO	ON DATE
QB	LTV	HSWT	498	LA28	2280	JAN.,	1976
НҮ	LTV	HSWT	512	LA58	2215	FEB.,	1976
FD	LTV	HSWT	552	LA67	2266	JULY,	1976
FE	LTV	HS₩T	559	CA26	2273,V-01	MAY,	1976
FE	LTV	HSWT	559	CA26	2273,V-02	JUNE,	1976
FE	LTV	HSWT	559	CA26	2273,V-03	JUNE,	1976
FE	LTV	HSWT	559	CA26	2273,V-04	JUNE,	1976
FE	LTV	HSWT	559	CA26	2273,V-05	JUNE,	1976
FI	LTV	HSWT	573	LA76	2305,V-01	JUNE,	1977
FI	LTV	HSWT	573	LA76	2305,V-02	JUNE,	1977
FR	LTV	HSWT	611	LA 109	2394	IN PROCES	s .
KY	LTV	HSWT	646	LA 128	2442	IN PROCES	s
FS	LTV	HSWT	742	LA144	2484	IN PROCES	s
FG	LTV	LSWT	422	MA 14	2283	NOV.,	1976
DD	LTV	1520SWT	S-081	MA 1	2004	NOV.,	1972
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1E	MSFC	HRWT	033	SA29F	2207	JULY,	1976
1F	MSFC	HRWT	034	SA13F	2277	JULY,	1976
1T	MSFC	HRWT	039	SA31F	2369	FEB.,	1982

		SPACE SHUT	TLE FACILITY	WIND TUNNEL S			
TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
1U	MSFC	IPBF	_	0н8	2382	NOV.,	
6C	MSFC	TWT	668	IA603	2416	JUNE,	1981
72	MSFC	14TWT	545	IA1B	2010	MAY,	
79	MSFC	14TWT	554	SA1F	2012	APRIL,	1973
76	MSFC	14TWT	555	OA 1	2005	NOV.,	1972
77	MSFC	14TWT	556	IA1A	2006	DEC.,	1972
78	MSFC	14TWT	558	MA9F	2011	APRIL,	1973
80	MSFC	14TWT	565	SA3F	2025	MAY,	1973
81	MSFC	14TWT	566	IA31F	2026	SEPT.,	1973
82	MSFC	14TWT	567	IA32FB	2027, V-01	SEPT.,	1975
82	MSFC	14TWT	567	IA32FB	2027,V-02	OCT.,	1975
82	MSFC	14TWT	567	IA32FB	2027,V-03	OCT.,	1975
84	MSFC	14TWT	568	OA47	2029	MAY,	1973
83	MSFC	14TWT	570	IA31FB	2028,V-01	DEC.,	1974
83	MSFC	14TWT	570	IA31FB	2028,V-02	DEC.,	1974
85	MSFC	14TWT	571	IA6A	2039	MARCH,	1974
86	MSFC	14TWT	572	SA5F	2051	AUGUST,	1973
90 .	MSFC	14TWT	573	IA31FC	2072	JAN.,	1974
87	MSFC	14TWT	574	OA48	2055,V-01	SEPT.,	1973
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TEST	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ON DATE
87	MSFC	14TWT	574	OA48	2055,V-02	SEPT.,	1973
87	MSFC	14TWT	574	0A48	2055,V-03	NOV.,	1973
91	MSFC	14TWT	578	SA 10F	2087	SEPT.,	1974
88	MSFC	14TWT	579/580	1A37	2063	NOV.,	1973
92	MSFC	14TWT	581	<b>0</b> A49	2095	SEPT.,	1974
18	MSFC	14TWT	582	IS6A	2158	OCT.,	1976
99	MSFC	14TWT	583	TA 1F	2145	OCT.,	1974
98	MSFC	14TWT	584	1A52	2042	MARCH,	1974
93	MSFC	14TWT	585	IA37B	2093	MARCH,	1974
97	MSFC	14TWT	587	FA4	2142	AUGUST,	1974
96	MSFC	14TWT	588	1A53	2123	JAN.,	1975
94	MSFC	14TWT	589	IA62F	2103	APRIL,	1974
95	MSFC	14TWT	590/595	SA26F	2111	NOV.,	1974
1C	MSFC	14TWT	594	EEAI	2174,V-01	NOV.,	1975
1C	MSFC	14TWT	594	EEAI	2174.V-02	NOV.,	1975
1C	MSFC	14TWT	594	EEAI	2174,V-03	NOV.,	1975
1A	MSFC	14TWT	596	TA2F	2165,V-01	DEC.,	1975
1A	MSFC	14TWT	596	TA2F	2165,V-02	DEC.,	1975
1A	MSFC	14TWT	596	TA2F	2165,V-03	DEC.,	1975
1A	MSFC	14TWT	596	TA2F	2165,V-04	JAN.,	1976
1A	MSFC	14TWT	596	TA2F	2165,V-05	DEC	1975

TEST	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
1D	MSFC	14TWT	599	OA 108	2190	JUNE,	1975
1L	MSFC	14TWT	600	FA14	2274	FEB.,	1976
11	MSFC	14TWT	603	SA28F	2244	AUGUST,	1977
1Н	MSFC	14TWT	604	SA8F	2223	JULY,	1975
1M	MSFC	14TWT	607	OA 131	2232	JUNE,	1975
1G	MSFC	14TWT	609	TA3F	2208,V-01	JAN.,	1976
1G	MSFC	14TWT	609	TA3F	2208,V-02	JAN.,	1976
1K	MSFC	14TWT	610	IA71	2227	NOV.,	1975
10	MSFC	14TWT	611	SA30F	2235	NOV.,	1975
10	MSFC	14TWT	620	SA14FA	2325	NOV.,	1976
1N	MSFC	14TWT	622	IA125	2253	JAN.,	1976
IP	MSFC	14TWT	640	SA14FB	2310,V-01	AUGUST,	1977
IP	MSFC	14TWT	640	SA14FB	2310,V-02	AUGUST,	1977
1Q	MSFC	14TWT	641 /646	IA140A/B	2335	DEC.,	1979
1R	MSFC	14TWT	645	SA21F	2345	OCT.,	1978
1U	MSFC	14TWT	649	IA181	2406	JULY,	1982
1X	MSFC	14TWT	652	FA25	2437	FEB.,	1979
17	MSFC	14TWT	655	FA27	2460	IN PROCES	ss ·
1 <b>Z</b>	MSFC	14TWT	656	FA28	2474	JULY,	1981
6 <b>A</b>	MSFC	14TWT	658	IA600	2479	IN PROCES	ss
6B	MSFC	14TWT	665	1A602	2481	JUNE,	1983

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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
A6	MSFC	14TWT	692	FA301	2514	JŲLY,	1984
D1	MSFC	14TWT	695	1A301	2518	IN PROCES	,
DF		LSWT		<b>DA2</b>	2016	APRIL,	
DG	NRLAD	LSWT	690	. OA5	2017	APRIL,	1973
DH	NRLAD	LSWT	693	EAI	2018	JUNE,	1973
DI	NRLAD	LSWT	694	OA6	2019	JUNE,	1973
DU	NRLAD	LSWT	696	0A9	2020	JUNE,	1973
DK	NRLAD	LSWT	698	OA 10	2022	JUNE,	1973
DL	NRLAD	LSWT	699	DA45	2021,V-01	NOV.,	1973
DL	NRLAD	LSWT	699	0A45	2021,V-02	OCT.,	1973
D <b>M</b>	NRLAD	LSWT	700	OA 14	2030	AUGUST,	1973
DN	NRLAD	LSWT	701	OA 16	2038	FEB.,	1974
DO	NRLAD	LSWT	704	OA 18	2045	SEPT.,	1973
DP	NRLAD	LSWT	705	0A21B	2053,V-01	DEC.,	1973
DP	NRLAD	LSWT	705	0A21B	2053,V-02	FEB.,	1974
DS	NRLAD	LSWT	708	OA71A	2068	DEC.,	1973
DT	NRLAD	LSWT	709	0A57A	2074	OCT.,	1974
DQ	NRLAD	LSWT	711	OA69	2081,V-01	JAN.,	1976
DQ	NRLAD	LSWT	711	DA69	2081,V-02	JAN.,	1976
DU	NRLAD	LSWT	712	OA71C	2086	FEB.,	1974

SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY	

TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATIO	ON DATE
DV	NRLAD	LSWT	713	OA57B	2080,V-01	OCT.,	1974
DV	NRLAD -	LSWT	713	OA57B	2080,V-02	OCT.,	1974
DW	NRLAD	LSWT	715	OA62A	2097	JUNE,	1974
DX	NRLAD	LSWT	716	0A86	2114	JUNE,	1974
DZ	NRLAD .	LSWT	717	OA62B	2104,V-01	JULY,	1974
DX	NRLAD	LSWT	717	OA62B	2104,V-02	AUGUST,	1974
F2	NRLAD	LSWT	719	OA37	2140	SEPT.,	1974
F5	NRLAD	LSWT	721	OA 1 10	2155	SEPT.,	1974
F6	NRLAD	LSWT	724	OA118	2139	OCT.,	1974
F8	NRLAD	LSWT	726	OA 1 19A	2187	NOV.,	1974
F9	NRLAD	LSWT	730	OA 1 19B	2203	APRIL,	1975
FA	NRLAD	LSWT	731	OA123	2202	APRIL,	1975
FB	NRLAD	LSWT	736	OA 124	2209	JUNE,	1975
FC	NRLAD	LSWT	737	OA143	2221	JULY,	1975
FF	NRLAD	LSWT	751	OA 163	2289,V-O1	DEC.,	1976
FF	NRLAD	LSWT	751	OA 163	2289, V-02	DEC.,	1976
FF	NRLAD	LSWT	751	OA163	2289,V-03	DEC.,	1976
FF	NRLAD	LSWT	751	OA 163	2289,V-04	DEC.,	1976
FG	NRLAD	LSWT	752	OA 172	2294,V-01	JUNE,	1981
FG	NRLAD	LSWT	752	OA172	2294,V-02	JUNE,	1981
FJ	NRLAD	LSWT	754	OA 176	2314	FEB.,	1981
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TEST CODE	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATIO	ON DATE
FL	NRLAD	LSWT	757	OA228	2322	NOV.,	1981
FM	NRLAD	LSWT	759	DA236	2337	DEC.,	1979
FN	NRLAD	LSWT	764	OA238	2351	JAN.,	1982
FO	NRLAD	LSWT	766	OA223	2402	NOV.,	1978
FP	NRLAD	LSWT	768	OA 163B	2361,V-01	ост.,	1977
FP	NRLAD	LSWT	768	OA 163B	2361,V-02	OCT.,	1977
FQ	NRLAD	LSWT	775	QA250	2392	DEC.,	1977
D2	NRLAD	LSWT	838	OA309	2519	OCT.,	1984
DR	NRLAD	7TWT	276	0A68	2061	DEC.,	1973
DY	NRLAD	7TWT '	278	OA91	2116	APRIL,	1974
F3	NRLAD	7TWT	280	1A69	2122	DEC.,	1974
F4 .	NRLAD	7TWT	281	IA68	2144	NOV.,	1974
F7	NRLAD	7TWT	282	1A70	2175,V-01	DEC.,	1974
F7	NRLAD	7TWT	282	IA70	2175,V-02	DEC.,	1974
F7	NRLAD	7TWT	282	IA70	2175,V-03	DEC.,	1974
FK	NRLAD	7TWT	297	IA141	2315	AUGUST,	1976
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GJ	NSWC		1310	OA 171	2433	OCT.,	1978
J <b>M</b>	NSWC	88	1275	LA79	2291 .	IN PROCES	S

SPACE	SHUTTLE FACILITY	/ WIND TUNNEL	SUMMARY
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TEST	FACILITY	SUBFACILITY	TEST NO.	NASA SERIES NO.	DMS-DR-	PUBLICATI	ON DATE
GM	TBCA	BTWT	1431	CA5	2211,V-01	SEPT.,	1975
GN	TBCA	BTWT	1431	CA20	2217,V-01	JAN.,	1976
GM	TBCA	BTWT	1431	CA5	2211,V-02	SEPT.,	1975
GN	TBCA	BTWT	1431	CA2O	2217,V-02	JAN.,	1976
GM	TBCA	BTWT	1431	CA5	2211,V-03	SEPT.,	1975
GN	TBCA	BTWT	1431	CA20	2217,V-03	JAN.,	1976
GP	TBCA	BTWT	1472	CA6	2262,V-01	NOV.,	1976
GP	TBCA	BTWT	1472	CA6	2262,V-02	NOV.,	1976
GQ	TBCA	BTWT	1477	CA9	2268,V-01	JUNE,	1979
GQ	TBCA	BTWT	1477	CA9	2268,V-02	JUNE,	1979
GQ	TBCA	втит	1477	CA9	2268,V-03	JUNE,	1979
GQ	TBCA	BTWT	1477	CA9	2268,V-04	JUNE,	1979
GO	TBCA	BTWT	1477	CA9	2268,V-05	JUNE,	1979
GV	TBCA	BTWT	1490/1493	CS4/5	2341	OCT.,	1976
GR	TBCA	BTWT	1496 /1497	CA 14A	2307,V-01	SEPT.,	1981
GR	TBCA	BTWT	1496 /1497	CA14A	2307,V-02	SEPT.,	1981
				•••••			
GL	UW	LSWT	1136	CA3	2201	DEC.,	1981
GO	UW	LSWT	1146	CA11	2236	DEC.,	1975
GU	'UW	LSWT	1170	CS3	2338	NOV.,	1976
GS	UW	LSWT	1173	CA 15A	2347,V-01	JUNE,	1980

SPACE SHUTTLE FACILITY WIND TUNNEL SUMMARY							
TEST				 NASA			
CODE	FACILITY	SUBFACILITY	TEST NO.	SERIES NO.	DMS-DR-	PUBLICAT	ION DATE
GT	UW	LSWT	1178	CA 15B	2348,V-01	JUNE,	1980
GW	UW	LSWT	1184	CA 17	2349	NOV.,	1977

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